PACIFIC FISHERMAN

APRIL
1950

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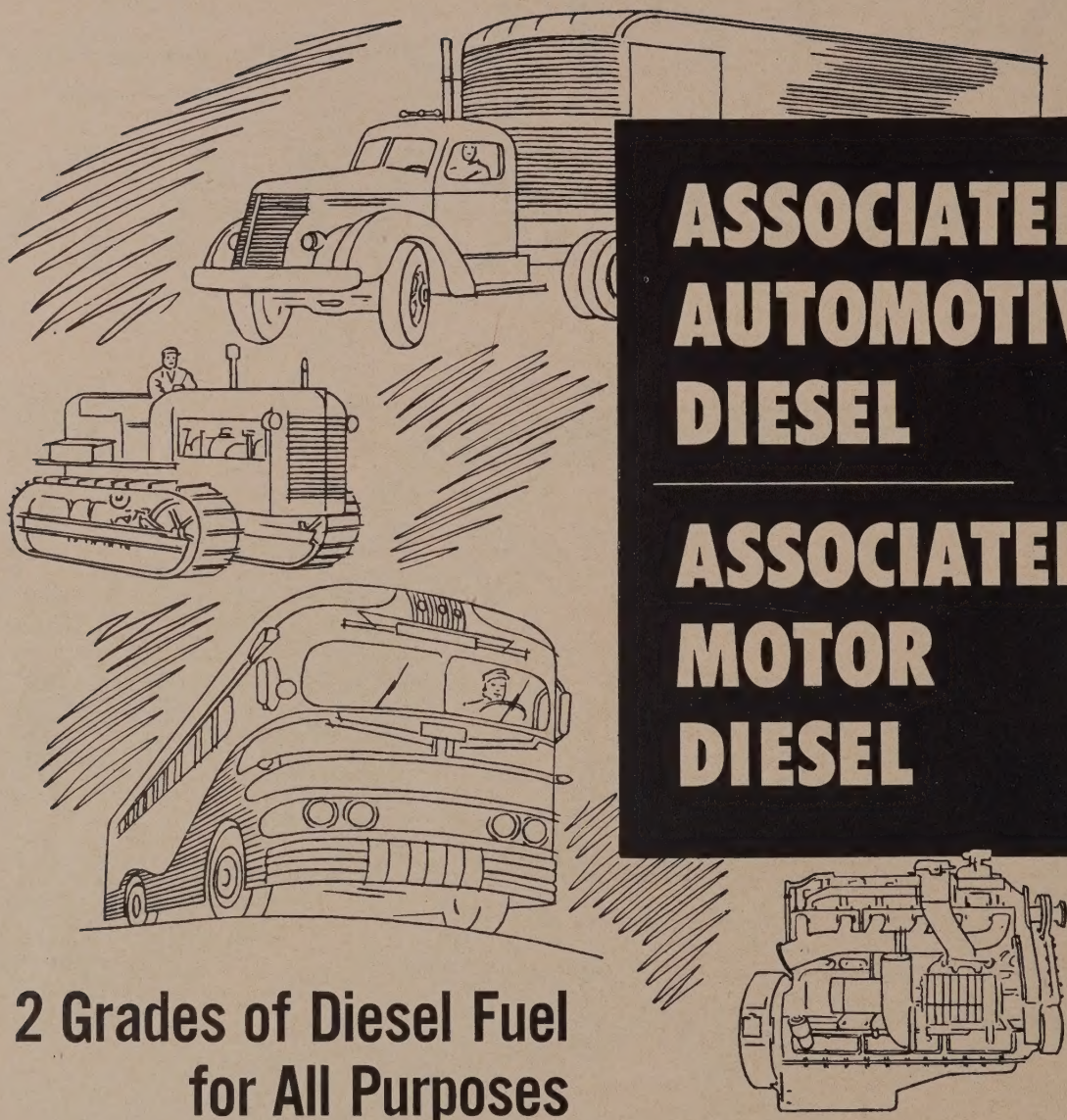

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ASSOCIATED MOTOR DIESEL

2 Grades of Diesel Fuel for All Purposes

ASSOCIATED AUTOMOTIVE DIESEL FUEL is a distilled, highly refined, light colored product made from selected crudes. It is a more volatile fuel than Associated Motor Diesel Fuel and has excellent ignition quality and high cetane. It is especially recommended for General Motors Diesel engines, series 71, Allis Chalmers tractor engines and Gray Marine Diesel engines.

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Order your trial supply of Associated Automotive Diesel Fuel or Motor Diesel Fuel *now*. They are tops for all diesel uses. Let's Get Associated!

Call your Associated Representative for expert help on any lubrication or fuel problem

TIDE WATER ASSOCIATED OIL COMPANY

Pacific Fisherman (with which is combined West Coast Fisheries) is published monthly except in January, when publication is semi-monthly, by Miller Freeman Publications Incorporated at 71 Columbia Street, Seattle, Wash. Subscription: United States and Possessions $2.00; Canada $2.00; Foreign $4.00. Entered as second class matter

PACIFIC FISHERMAN

A Miller Freeman Publication

Vol. 48 No. 5

APRIL, 1950

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LAST MINUTE NEWS SUMMARY

Alaska's 10-to-1 Non-Resident License Fee Upheld by Court

. Validity of Alaska's $50 license fee for non-resident fishermen, 10 times the amount charged residents, was upheld as legal in a decision by Federal Judge George W. Folta, handed down in Juneau March 22. The case was brought by the Alaska Fishermen's Union, which charged that the license fee was so discriminatory against non-resident fishermen as to be invalid.

In its ruling the court said:

"Encouragement of settlement and preferment of local enterprise appear sufficient to uphold the tax."

It is expected that appeal will be had to the circuit court, which once overthrew a similar law as transgressing the rights of non-residents by unreasonable discrimination.

Del Mar Plant Sold to Ecuador

Purchase of the entire plant of the Del Mar Canning Co. at Warrenton, Ore., and plans for its transfer to Ecuador, South America, was announced recently by the President of Ecuador. The Del Mar plant was purchased from the company headed by Edward David, by American and Foreign Enterprises, which six months ago contracted with the government of Ecuador to establish a fish packing establishment on that country's coast.

The Del Mar plant was described fully in this journal for October, 1948. It consists of a cannery capable of packing tuna, sardines, other fish and shellfish; a complete fish filleting and freezing plant; and a reduction plant and fish solubles condensery.

The Ecuadorean announcement refers to the cannery and refrigeration facilities, but not to the reduction plant. Whether it is involved in the transaction is not plain.

1950 Trade Negotiations Will Involve Canned Fish Products

Tariffs on canned salmon, sardine and tuna—and perhaps other canned fish products—are expected to be involved when a series of trade agreement negotiations are held this summer. Washington advises that dates for preliminary hearings on fish products are expected to be announced shortly, and that such hearings will be held late in April and throughout May.

YEARBOOK Erata

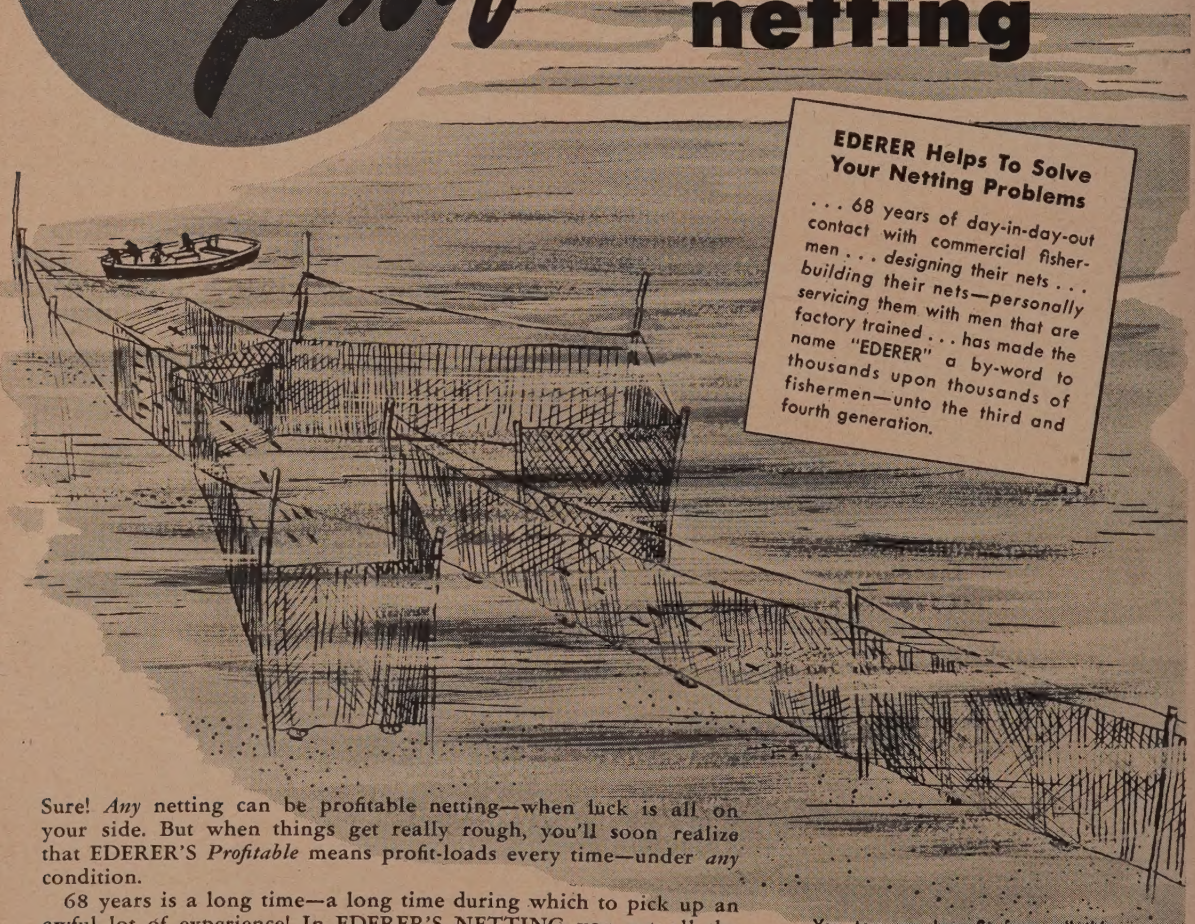
Errors in three captions in the 1950 Pacific Fisherman Yearbook have caused editorial embarrassment, and are here corrected, with apologies:

The name of the Van Camp Sea Food Co. was omitted from the list of canneries shown on the Astoria, Ore., waterfront in the aerial photograph on page 223.

In another aerial picture on page 214 reference is made to the yard of the Lynch Ship Building Co., which is now owned and operated by the National Steel & Shipbuilding Corporation, from whose other yard it is separated by the Peoples Packing Corporation.

Typographical garbling of the caption on the picture of Mexican shrimp trawlers on page 257 omitted the name of the National Steel & Shipbuilding Co., which built the craft.

EDERER'S *Profitable* netting



EDERER Helps To Solve Your Netting Problems

. . . 68 years of day-in-day-out contact with commercial fishermen . . . designing their nets . . . building their nets—personally servicing them with men that are factory trained . . . has made the name "EDERER" a by-word to thousands upon thousands of fishermen—unto the third and fourth generation.

Sure! *Any* netting can be profitable netting—when luck is all on your side. But when things get really rough, you'll soon realize that EDERER'S *Profitable* means profit-loads every time—under *any* condition.

68 years is a long time—a long time during which to pick up an awful lot of experience! In EDERER'S NETTING you get all the benefits of this 68 years of experience at turning out rugged, uniform netting. The kind of netting that will do the job you expect it to do—whatever your particular type of fishing.

With a record like this, it's easy to see why more and more EDERER NETTING is being chosen at all the principal fishing ports. It's easy to see—also—that this is the kind of a record that adds up to *Profitable* Netting—EDERER'S!

You too can benefit from all this experience by talking to the Ederer salesman or Ederer dealer in your port. Be it trap netting for Alaska, pound traps for Maine or the Great Lakes—*let "Ederer" be the buy-word to you too.*

R. J. EDERER COMPANY

HOME OFFICE: 540 ORLEANS ST, CHICAGO

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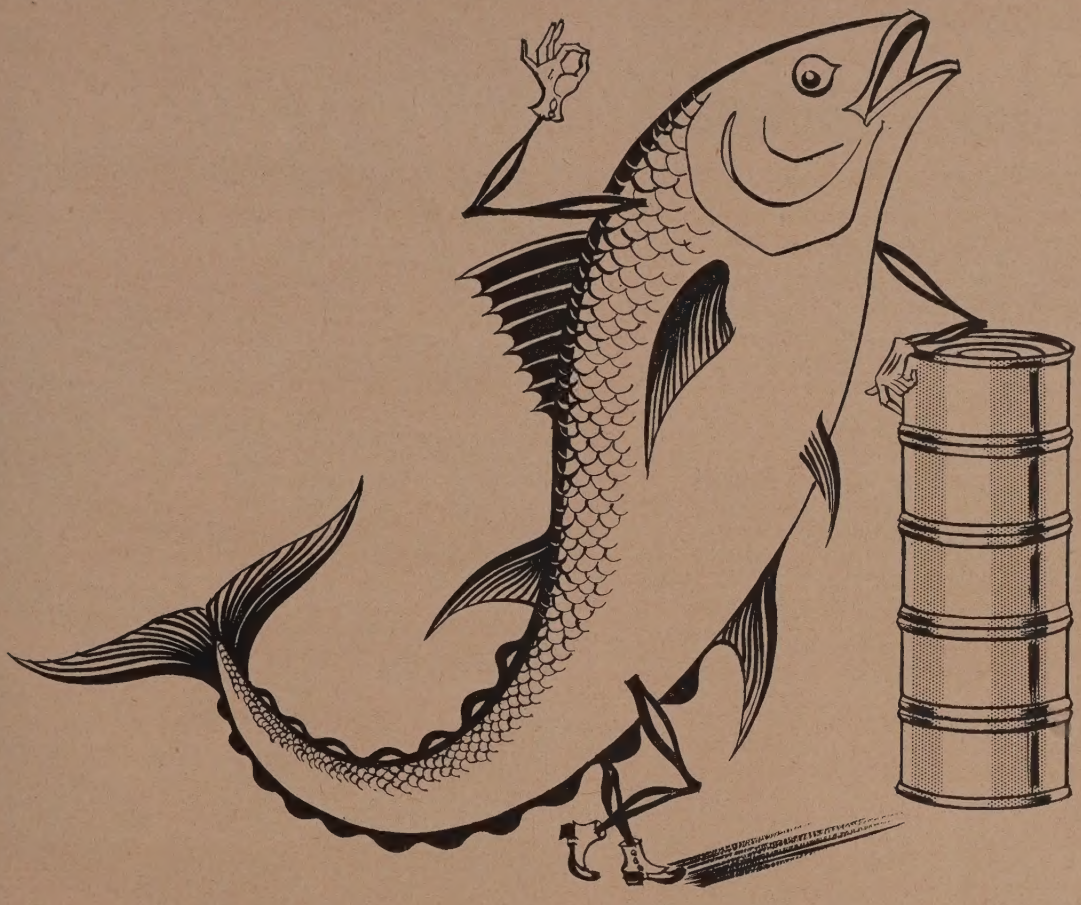
San Francisco, California

SUNDE & D'EVERS COMPANY
Seattle, Washington
Ketchikan, Alaska

THE BEEBE COMPANY
Portland, Oregon
Astoria, Oregon



"I'll bet a fin you can't find a better can than a Continental"

says **W. BLUEFIN TUNA**

Continental cans for fish are ALWAYS CLEAN, BRIGHT and TIGHT — engineered to package fish right.

Whether you use semi-formed or ready-formed cans you'll find Continental is TOPS FOR SERVICE.

No matter how many cans you need, you can depend on Continental to deliver them WHERE AND WHEN YOU WANT THEM.

You can't beat Continental as a dependable source of supply!

CONTINENTAL CAN COMPANY

LATHROP POWERED

Shrimp Trawler, powered by a Lathrop D-90, one of the fleet owned and operated by Captain James Green, Wadmalaw Island, South Carolina.

One Lathrop sells another — because there's no stronger proof of value than the personal experience of satisfaction. That's why shrewd fleet owners like Captain Green are standardizing their new power requirements with Lathrops.

If you want your power to be lasting, serviceable and economical, look into a Lathrop for your best value:

- LH Models, light weight, low cost, 45 to 132 hp.
- Mystic Models, top quality, medium speed, 100 to 175 hp.
- Diesel Models, four cycle economy, 50 to 187 hp.
- Standard and Engineers Models for heavy-duty work, 21 to 115 hp.

Engine parts are always available. Representatives at key ports.

THE Lathrop ENGINE CO.
MYSTIC, CONNECTICUT
SINCE 1897 MANUFACTURERS OF RELIABLE MARINE ENGINES

Specialists!

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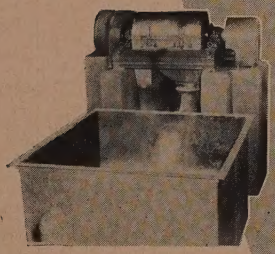
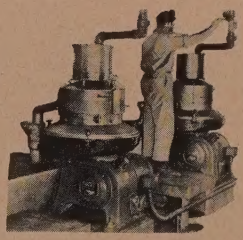
will you be ready for ALL the profits?

MORE MEAL ★ MORE OIL ★ LESS LABOR ★ MORE PROFITS

That's the story of *continuous* handling of press liquor made possible by the Sharples Super-D-Canter and the Sharples Nozljector. . . . More meal from the press liquor because of the Super-D-Canter . . . more and better quality oil from the Nozljector . . . continuous and troublefree operation because of the combination of these two machines . . . the combination known throughout the fishing industry the world over for extracting all the profits from press liquor continuously and at amazingly low cost of operation.



Because the Sharples Super-D-Canter thoroughly removes fish meal from press liquor, you not only recover more meal, but the oil-separating Nozljector removes more oil and runs for longer periods without cleaning.



The Sharples Nozljector provides maximum recovery of oil that is lighter in color and lower in free fatty acid content.

THE SHARPLES CORPORATION

NEW YORK 17, N. Y. 501 Fifth Avenue
CHICAGO 4, ILL. 80 E. Jackson Boulevard
BOSTON 10, MASS. 230 Congress Street
SAN FRANCISCO 5, CALIF. 686 Howard Street
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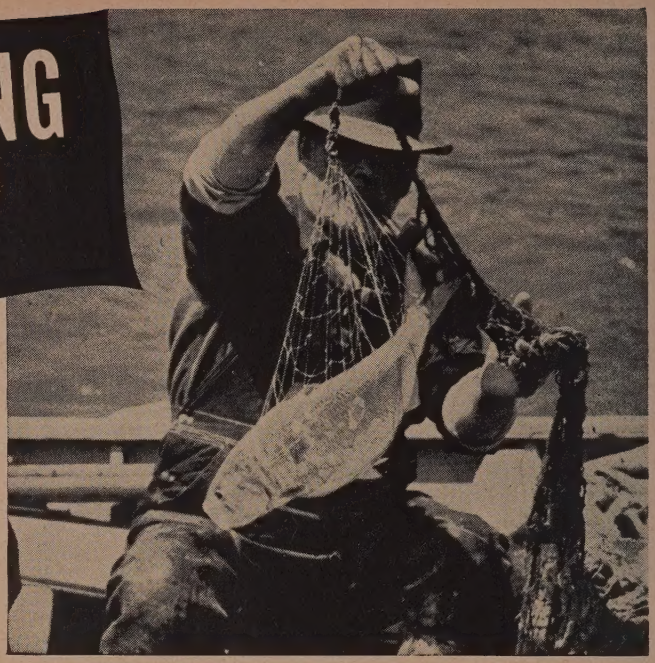
ASSOCIATED COMPANIES AND REPRESENTATIVES THROUGHOUT THE WORLD

EXECUTIVE OFFICES AND FACTORY, 2300 WESTMORELAND STREET, PHILADELPHIA 40, PENNA.

PAULS NETTING
. . . made to safeguard your PROFITS!



That's right—PAULS nets are so designed and constructed that they can be counted on to hold up under the severest strains—and help you bring in the kind of profit-loads that bring a sparkle to the eye of any commercial fisherman.

So, if you are looking for a netting that has "muscles" to match your own . . . that has stamina, quality and uniformity, you'll find Pauls YOUR kind of net.

No wonder more and more fishermen are saying: *"Pauls Netting for me everytime!"*

PAULS FISH NET COMPANY

MAIN OFFICE: 357 WEST OHIO STREET, CHICAGO, ILL.

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Joe Rappa, 44 Municipal Wharf, Monterey, Calif.
Alfred Puusti & Co., 212 Taylor Ave., Astoria, Oregon
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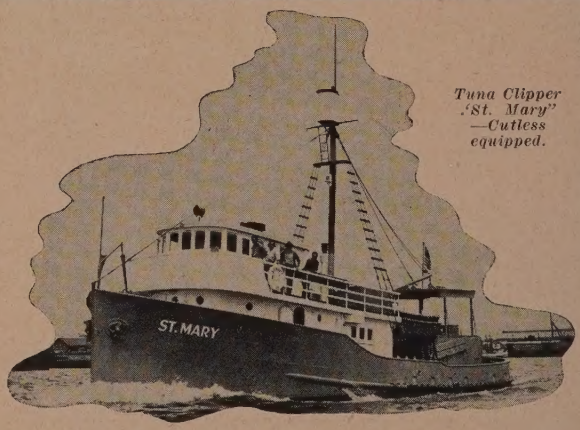
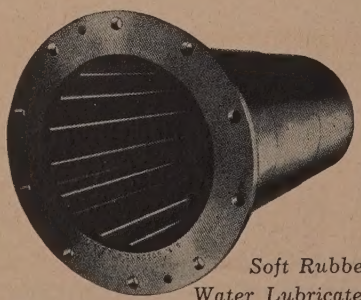
OVER TEN YEARS and LITTLE WEAR



Tuna Clipper "St. Mary" —Cutless equipped.



Soft Rubber Water Lubricated

Louis Massa equipped his tuna clipper "St. Mary" with Cutless bearings in 1938. Over ten years later these same Cutless bearings are still in service and show negligible wear. Today Cutless bearings are made even better. They are made of Ameripol oil resisting rubber that increases the life of the bearing.

Factory stocks to 10" size available overnight by air.

LUCIAN Q. MOFFITT, Inc.

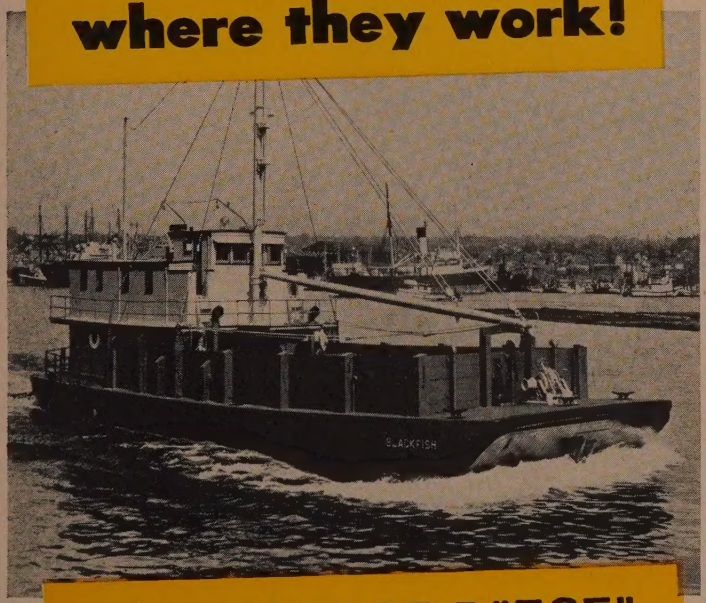
AKRON 8, OHIO

Engineers and National Distributors

B.F.Goodrich *Cutless* BEARINGS

PROPELLER SHAFT

They need RUGGED POWER where they work!



CATERPILLAR DIESEL

REG. U. S. PAT. OFF.

Marine Engines

The remote Bristol Bay area of western Alaska is no place for a boat with a temperamental engine. You want power that's fool-proof and foul-proof, like the "Cat" Diesel Marine Engines in these square-nosed sister barges, the *Cachalot* and the *Blackfish*, used to pick up fish from the gillnetter boats and to feed the fishing crews. 80′ x 24′ x 4′5″, each barge has two D13000s driving 44″ x 30″ propellers. Normal speed is 8.75 knots.

Ask any fisherman who knows "Cat" Marine Diesels, and he'll tell you they're easy to run, simple to service and thoroughly dependable. Ask any owner, and you'll hear they're long-lived and economical. That's why it pays to standardize on them in fleet operation. The Alaska Packers Association, which owns the *Cachalot* and the *Blackfish*, also relies on "Caterpillar" power in the barges *Sea Lion* and *Manatee*.

Whether you need Marine Propulsion Engines, Electric Sets or Power Units, there's a "Cat" Diesel that meets your specifications. Your "Caterpillar" dealer is as close as the phone for information or service—call him today!

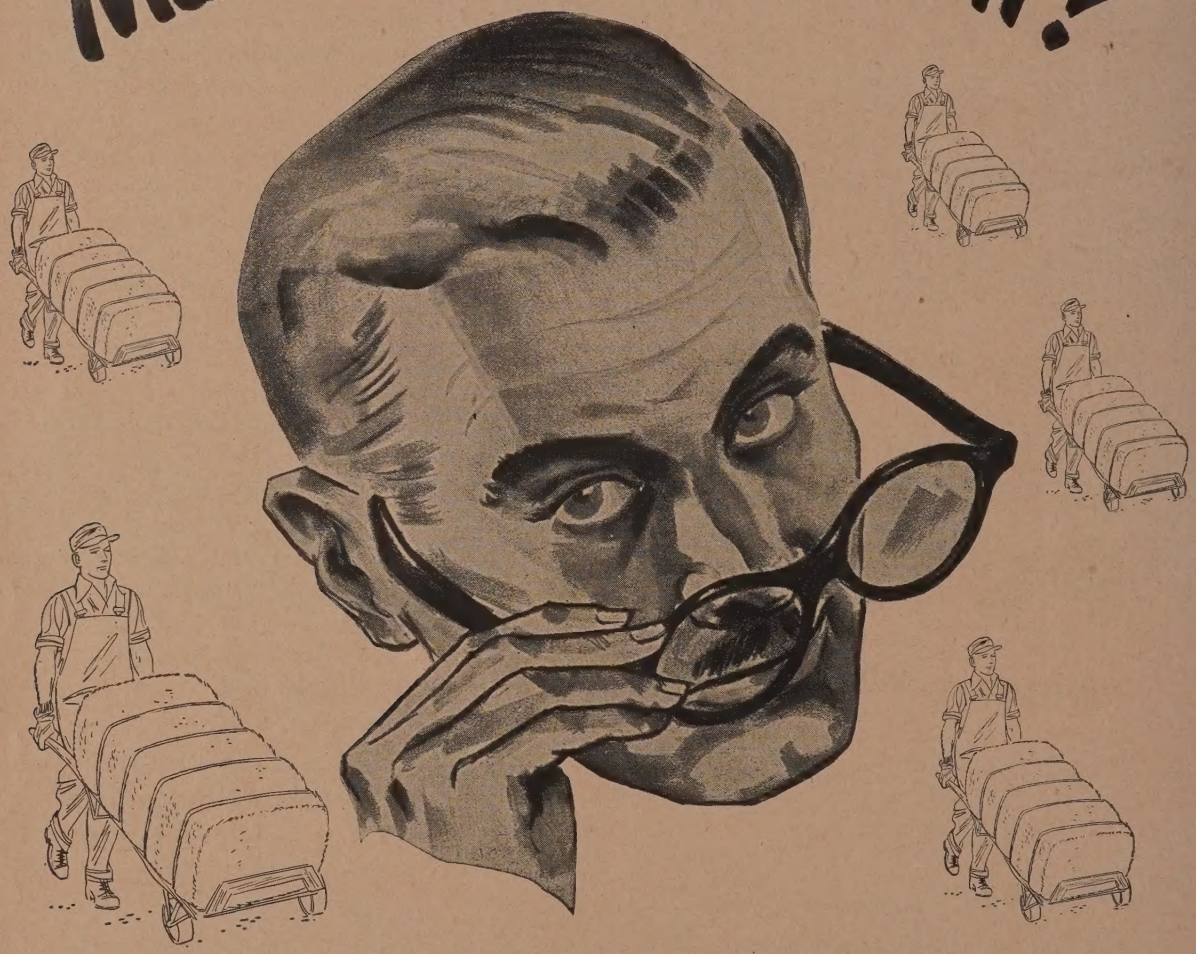
CATERPILLAR TRACTOR CO., San Leandro, Calif.; Peoria, Ill.

LOOK UNDER THE HIDE

"Caterpillar" pistons are made of highest quality aluminum. Weighing only ⅓ as much as iron, they decrease inertia loading, thus reducing crankshaft and bearing fatigue. Pistons are cooled by an oil spray—prolonging piston life and decreasing lubrication breakdown. Rings are made to high-speed aircraft standards. Top rings are chrome-plated—all rings are honed and lapped to offer up to 5 times normal ring and liner life. *Look under the hide for quality and long life—you'll find it in every "Caterpillar" part.*

REFLECTIONS OF A ROPE BUYER (YOU, PERHAPS?)

"Manila's manila, isn't it?"



. . . no, not when one brand of manila rope can outlast all others

Steel is steel but you can't make a razor blade out of a barrel hoop! So when you buy rope, don't be misled by the word "manila." There's a great variation in quality of the many grades of manila available today. Even though true No. 1 manila rope may cost a little more to buy, it is far cheaper *to use. Here's evidence:*

Plymouth periodically tests all brands of rope. Recent tests—based on tensile strength and an assumed equal rate of deterioration—show that when the average life of ten other brands was 4.8 months, then the life of PLYMOUTH SHIP BRAND was 6 months!

Actually, you would have to buy rope at 9¢ less per pound before you could approach SHIP BRAND'S low cost per month *to use!*

PLYMOUTH CORDAGE COMPANY
Plymouth, Massachusetts

Prove Plymouth Savings Yourself
Send for unique cost-of-service chart. With it you can quickly figure what it is actually costing you *to use* your present rope, and how much you could save by using Plymouth.

SEE AND HEAR "THE PLYMOUTH STORY." *If you have not yet seen this color, sound film, write for an early showing. It shows how much* more *Plymouth puts into its ropes, so that the user may get more out of them.*

PLYMOUTH
Cordage Products

PLYMOUTH 1824

THE ROPE YOU CAN TRUST BECAUSE IT IS ENGINEERED FOR YOUR JOB

Make more profit from your fish...in cans!

Let Canco help you widen the market for your catch.

American housewives will buy half a billion dollars' worth of canned fish this year. Why not package *your* product—brand it to identify your quality—and get your share of the enormous national market?

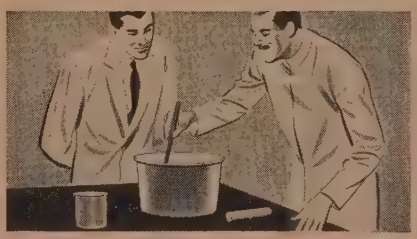
Fish can be prepared and sold in a variety of ways—in cans. Tasty, skillfully planned recipes on your package will increase its appeal to housewives, make them come back for more.

Result: increased volume, extra profits for you.

CALL CANCO FIRST

How Canco will help you

Lay out your plant . . . give you blueprint and layout recommendations for greatest efficiency.



Canco's nutritionists and testing kitchen will suggest ways your fish products can be made more appealing to the public.

Recommend types of cans, lining, closures . . . advise you on all technicalities of processing.

Lithograph designing service by Canco merchandising experts to help your product attract customers and sell faster.

AMERICAN CAN COMPANY

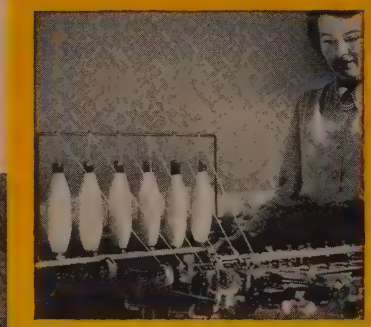
New York • Chicago • San Francisco

UNIFORMITY

Makes the Big Difference

In SEINE TWINE

TESTING STRENGTH AND ELONGATION OF INDIVIDUAL STRANDS FOR SEINE TWINE WITH MOSCROP TESTER. This unit automatically tests 6 strands at one time. One of a series of comprehensive laboratory controls throughout production to assure uniformity in all Mt. Vernon-Woodberry products.



Gives You

Greater Uniformity
Greater Strength

Nets made or repaired with Woodberry Seine Twine have the wear and dependability fishermen look for — because Woodberry Seine Twine is produced under precise scientific controls to assure greater strength.

For dependability, weather-tight protection, choose boat covers made of Woodberry Extra Duck — another Mt. Vernon-Woodberry product.

Mt. Vernon-Woodberry **TURNER HALSEY** COMPANY *Selling Agents* 40 WORTH ST. - NEW YORK *Mills*

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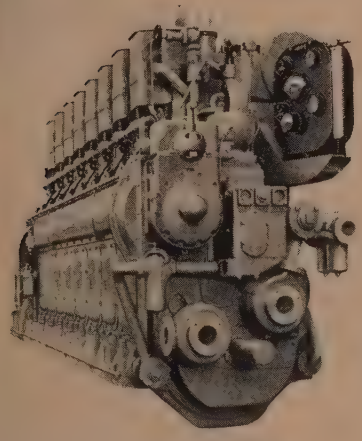
"BECAUSE IT'S GOOD BUSINESS"

—Judy S. repowers with an ENTERPRISE DIESEL



Enterprise DMG-38 Diesel

This is the engine that repowers the 124' Judy S. Rated 825 HP at 400 RPM, four cycle, direct reversible, turbo-charged. Reconversion work by Harbor Boatbuilding Co., Terminal Island, Calif., who also built the original vessel.

When Captain George Soares bought the tuna clipper *Judy S.* last year, first thing he did was to replace her old and outmoded engine with a new Enterprise DMG-38 Diesel. Lighter in weight, developing greater horsepower, this new engine is living up to Captain Soares highest expectations:

> *"I am highly satisfied with my new Enterprise Diesel for many reasons," he says, "including its fine performance and the prompt service that is always available. I've found, from many years' experience, that operating Enterprise engines is good business all around."*

Owners of Enterprise-powered craft of *all* types attest to their unmatched dependability, their low operating cost per horsepower, their reliable, trouble-free operation. For *your* next boat or re-powering job specify Enterprise—the choice of power experts.

Bulletin No. 174 fully describes the complete line of Enterprise Marine Diesels. Write for your copy today!

ENTERPRISE

Marine Diesels

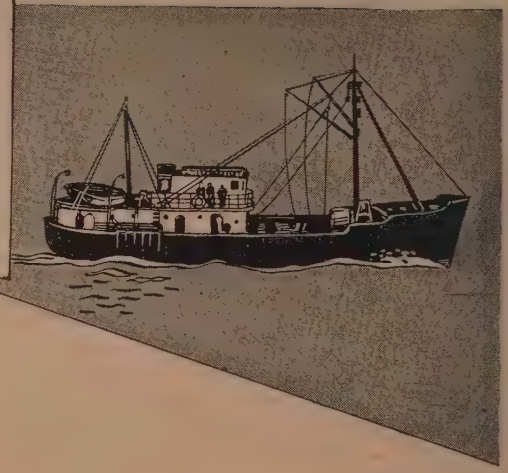
ENTERPRISE ENGINE & FOUNDRY COMPANY

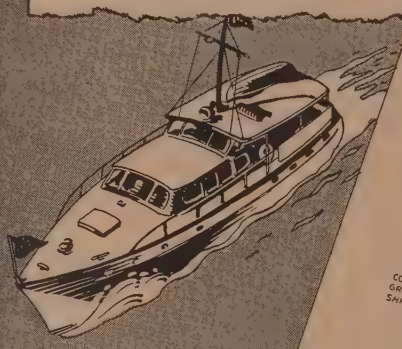
18th and Florida Streets, San Francisco 10, Calif.

Offices in Principal Cities

...Here's what they're saying about **Pettit Paint**...

After using Pettit Paints for 30 years, the Saunders Company is certainly in a position to speak with authority about our marine paints. The wind, rain, sun and torrid waters of the Gulf of Mexico are a tough proving ground for any paint . . . and Pettit has always come through with flying colors!





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T. E. WELLES, First Vice-President

E. E. Saunders & Co.
ESTABLISHED 1880

CONSTANT SUPPLY OF RED SNAPPER AND GROUPER, OTHER VARIETIES IN SEASON
SHRIMP, OYSTERS, CRABMEAT Etc.

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MANUFACTURERS OF ICE
JOBBERS & FACTORY REPRESENTATIVES
ALL KINDS MARINE SUPPLIES.

FRESH GULF FISH

PENSACOLA, FLA.
March 17, 1949

Mr. J. W. Johnson, President,
Pettit Paint Company,
507 Main Street,
Belleville, New Jersey.

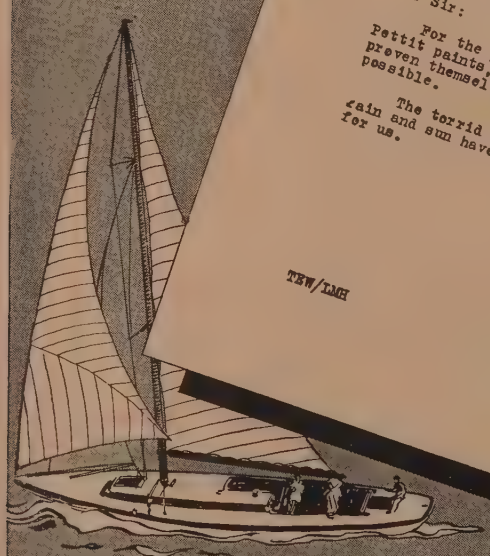
Dear Sir:

For the past thirty years we have been the users of Pettit paints, and it is a pleasure to say that they have proven themselves under some of the toughest conditions possible.

The torrid waters of the Gulf of Mexico, the wind, rain and sun have proven that Pettit is the marine paint for us.

Yours very truly,
E. E. SAUNDERS & COMPANY
T. E. Welles,
T. E. Welles,
First Vice-President

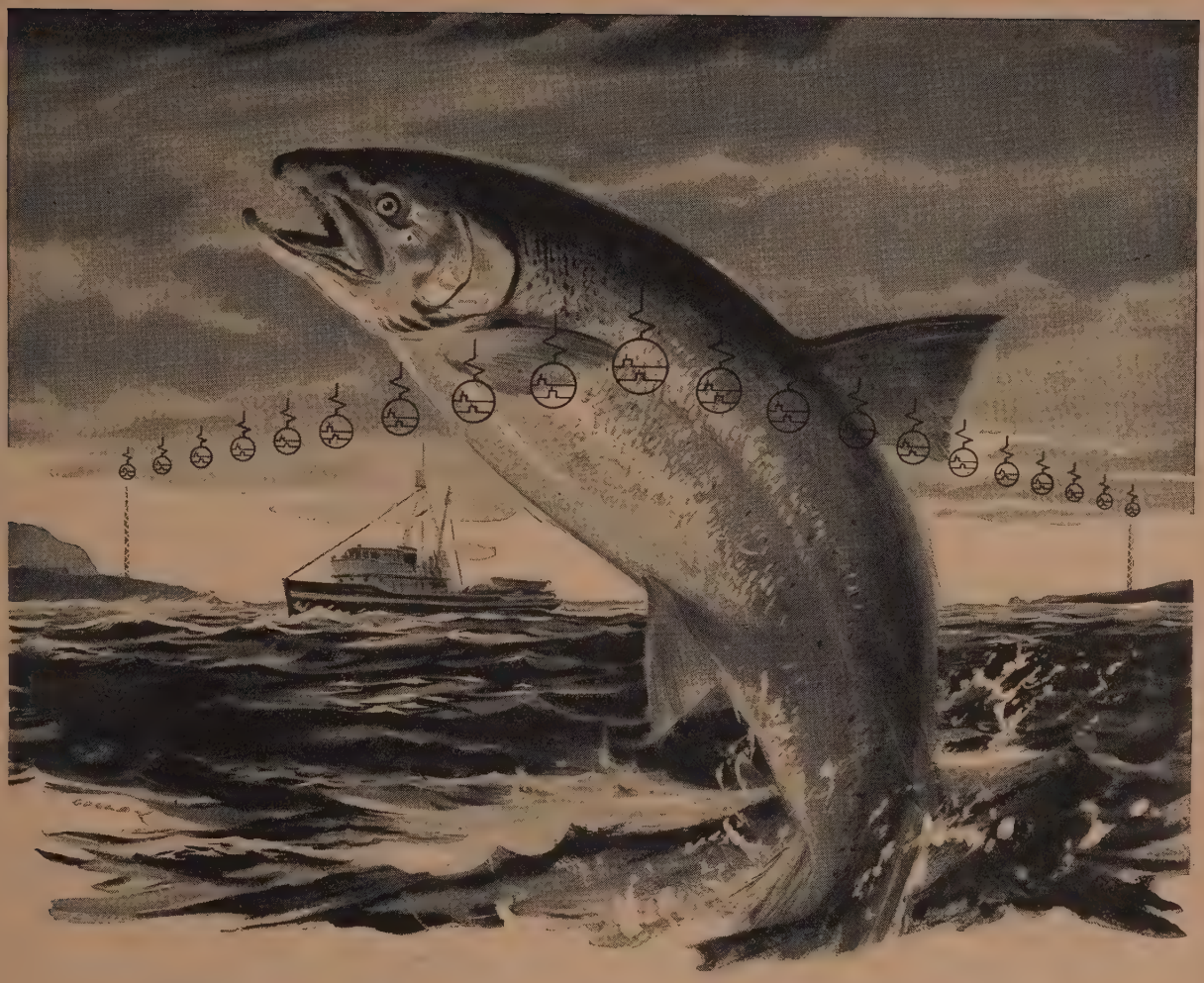
TEW/LMH



Pettit Paint

Preserves Protects and Beautifies

PACIFIC COAST DISTRIBUTORS: Nordby Supply Co., Seattle, Wash., and Ketchikan, Alaska; The Beebe Co., Portland and Astoria, Oregon; Carstens Marine Supplies, Spokane, Wash.; Gray's Motor Service, Inc., Salt Lake City, Utah; B. H. Hebgen Co., Ltd., San Francisco and Los Angeles, Calif.; Harbor Marine Supply Co., Terminal Island, Calif.; Balboa Marine Hardware Co., Newport Beach, Calif.; Nuttall Styris Co., San Diego, Calif.; Outdoor Equipment Corp., Las Vegas, Nevada; Jack Bolton Marine, Denver, Colo.



They always get a big catch

Weather bad, visibility poor... but the fishing is *good*. For with Sperry's new Direct-Reading Loran, the fishing captain or mate can locate the most profitable fishing waters through adverse weather and stay there while the run is on...and return again and again to these fertile fishing spots.

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Check These Advantages of New Sperry Mark 2 Loran

4 OPTIONAL MOUNTINGS — depending on space available. Control panel can be tilted to suit operator.

IMPROVED READABILITY—"Black light" (ultra-violet) lights up large numbers on time-difference meter and station selectors and does not interfere with night vision. Recessed scope face permits easy reading in lighted chart room.

EASY TO OPERATE — New automatic frequency control aids in positioning signals and eliminates drift.

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THE MARK 2 LORAN is backed by Sperry's service organization. Write our nearest district office for additional information.

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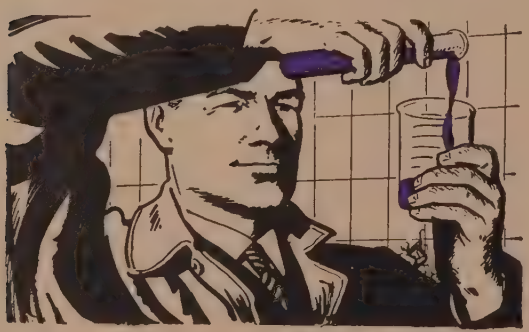
T5X CUTS MAINTENANCE COSTS ON MARINE ENGINES

Diesel operators use the famous purple oil to keep repair costs at a minimum

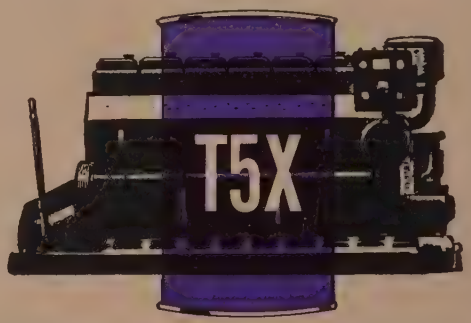
1. Performance reports from marine captains and engineers *prove* that T5X oil gives marine engines far better protection. For example, one owner* operated eight tugboats under extreme conditions between Seattle and Alaska for two years, using T5X oil.

*Name available upon request

2. It was standard practice to run the oil 2500–3000 hours before changing. Yet, at each inspection, the twin-engine Diesels were *clean* and *free* from sludge or lacquer. *Top* operating efficiency was maintained, with *low* maintenance costs, by using T5X.



3. What is this remarkable *purple* oil? It's a highly refined, 100% paraffin-base oil from highest quality base stock. It's a fully compounded, *detergent type* oil with a distinctive purple color that comes from an exclusive ingredient which helped give the oil its amazing stability.



4. The powerful combination of additives in T5X enables this great purple oil to do an outstanding job under *severe* conditions. For T5X reduces oxidation; increases bearing protection; and provides *greater cleansing action*—along with thorough protection against wear.

T5X

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Other quality lines available through the seven affiliated firms listed on the map at the right, include:

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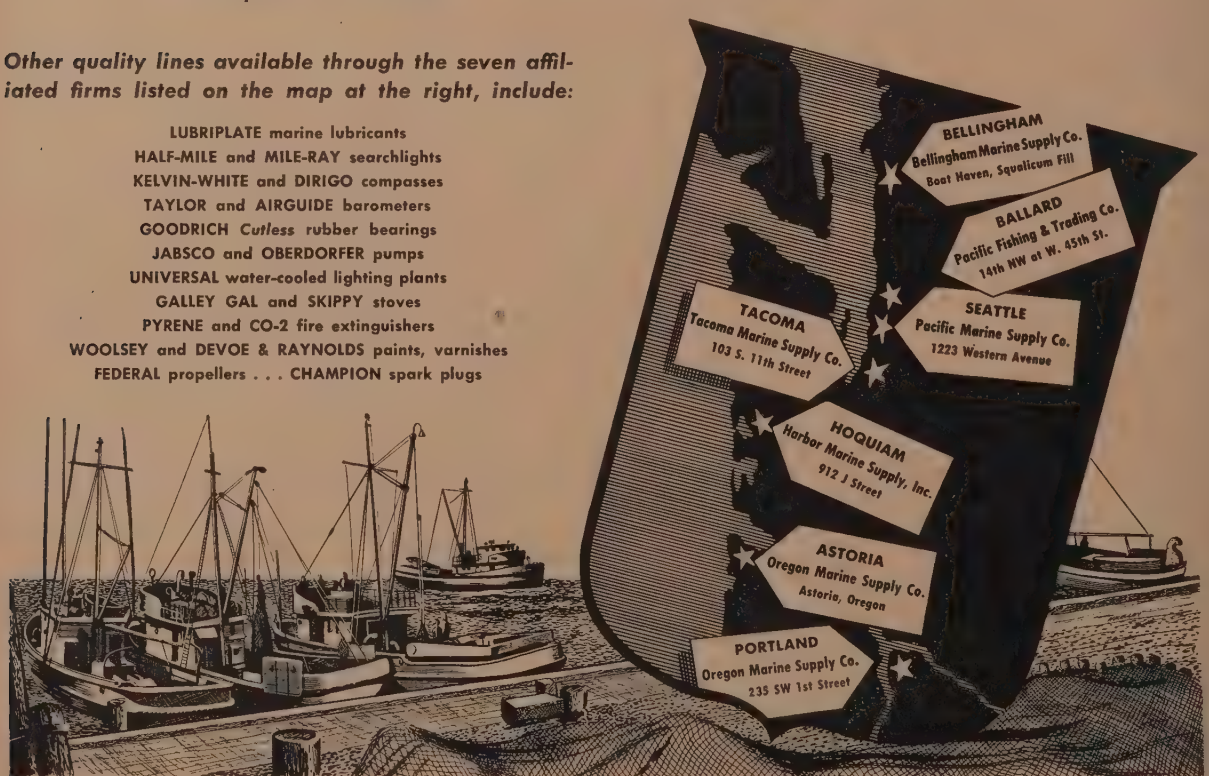


PACIFIC FISHERMAN APRIL, 1950

The FRUITS of RESEARCH

First Revelation of Scientific Data From Fisheries Institute's Research Made to U. S. Salmon Industry

First public presentation of progress in Alaska salmon investigation by the University of Washington's Fisheries Research Institute—a work of vital importance to the industry—was made March 10 at the Salmon Research Conference in Seattle.

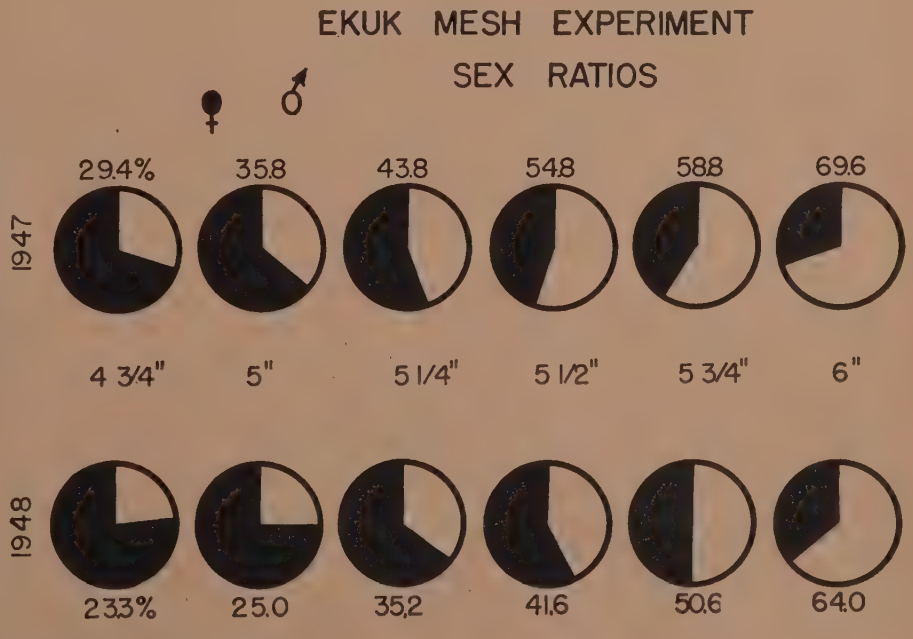
An impressive array of data, profusely illustrated by charts, tabulations and color-photo projections, was presented and discussed by Dr. William F. Thompson, director of the Institute, and members of his staff, before an audience of about 400 people broadly representative of the salmon industry.

The conference was of especial significance as signalizing the fact that, for the first time in history, the problem of maintaining the Alaska salmon runs is being attacked in a comprehensive and adequate manner; and that this work, though carried on independently by the University of Washington, is being done under contract with, and through direct financial support from, the industry itself.

Broad Interest Shown

A remarkable feature was the breadth of interest represented by the audience, which included not only the Alaska cannery operators but large numbers of their responsible employees—superintendents, foremen, bookkeepers and office staffs; even the sales departments and agents were well represented. And they came not only from the Alaska segment of the business, but included many Puget Sound and Columbia River operators, and even a number from British Columbia. With them, also, were numerous representatives of allied industries, as well as official administrative and research agencies, such as the State Fisheries Department, U. S. Fish & Wildlife Service and International Sockeye Commission.

The presentation was essentially a progress report on a work still largely in its initial stages; but numerous



Accompanying "pie charts," in which the black segments represent percentage of females and white segments those of males, shows how the percentage of males, given in the figures above and below the two series of charts, increases as the size of gillnet mesh—represented by the row of figures between the two lines of circles—is enlarged.

EKUK MESH EXPERIMENT

TOTAL NUMBER MALES

TAKEN

MESH	1946	1947	1948	TOTAL
4 3/4"		1,036	910	
5"	889	1,446	1,154	3,489
5 1/4"	963	1,709	2,004	4,676
5 1/2"	1,110	1,929	2,001	5,040
5 3/4"	932	2,155	2,153	5,240
6"		2,266	2,606	
5-5 3/4" INCL.	3,894	7,239	7,312	

Showing how the number of male Red salmon taken in gillnets increases as the size of the mesh is increased.

facts stood out as of prime importance, while the lines of inquiry set forth promise soon to provide answers to many underlying questions.

The industry's deep-seated concern with the research was manifest from the keen interest with which all details of the discussion were followed—not only observations bearing directly on management of the resource, but the methods employed, preliminary problems to be solved, and tentative indications of conditions affecting the salmon runs. Packers, who had previously known little of the work in progress, were enthusiastically convinced of its worth-while character from a hard-boiled, dollars-and-cents standpoint; and one of them, who seemed to express the general feeling, remarked, "This was the most instructive meeting I have attended in years."

Research Conducted By University of Washington

Chairman of the conference was Aubin R. Barthold, chairman of the Research Institute's advisory board, who briefly explained the purpose of the meeting and introduced W. C. Arnold, managing director of the Alaska Salmon Industry, Inc., the contracting agency on behalf of the packers.

Mr. Arnold reviewed the current research movement from its inception in 1945; stressing its magnitude, and the fact that it is conducted by the University on a strictly independent and scientific basis. Dean Edwin R. Guthrie of the University's graduate school, in response, discussed the relationship between the University and the industry, with the theme that the usefulness of the research to the operators depends upon its *impartiality* and *thoroughness.*

A Serious Pioneer Effort

Dr. Thompson, in opening the presentation, characterized the Alaska salmon research as a pioneer effort. "I believe," he said, "it is the first instance of a scientific program of such seriousness and magnitude, directly supported by such an industry; and this conference is the first instance of direct presentation of a report of this kind to the salmon industry. Our program is a notable example of an industrial group taking an intelligent interest in the resource on which it is based.

"In conducting this research, it is essential that we carry the industry with us. We must make our work and our methods understandable to the industry; and we are now seeking to do this in our first presentation."

Dr. Thompson added that the preliminary task of building up a competent scientific staff; of training men as experts, qualified to speak with authority on the various phases of the research, and providing them with technical equipment, has been well accomplished. The regular staff now numbers upwards of 20 people, most of whom are engaged (some throughout the year) in field work on the Alaska fishing and spawning grounds.

The presentation itself took the form of projection on two screens of data, charts and illustrative matter, covering all phases of the work and its results to date, with running explanation and comment by Dr. Thompson and active participants in the various projects in the Bristol Bay, Kodiak Area and Southeast Alaska investigations.

EKUK MESH EXPERIMENT

TOTAL NUMBER FEMALES

TAKEN

MESH	1946	1947	1948	TOTAL
4 3/4"		2,458	2,669	
5"	1,171	2,504	3,146	6,821
5 1/4"	826	2,216	3,597	6,639
5 1/2"	500	2,007	2,806	5,313
5 3/4"	331	1,520	2,250	4,101
6"		976	1,389	
5-5 3/4" INCL.	2,828	8,247	11,799	

Showing how the number of female Red salmon taken in gillnets decreases with increase in the size of the mesh.

Those who took part were R. L. Burgner, executive assistant and member of the Bristol Bay group; Ole Mathisen, Bristol Bay project leader, with Rea Duncan, John Gilbert, Swei-Yen Koo, J. W. MacRae and Charles Walker; for Kodiak, Donald Bevan, project leader, with Allan Hart and Wallace Noerneberg; for Southeast Alaska, Leon Verhoeven, project leader, with Don Kauffman, John Martin, Jay Rockwell, W. L. Sheridan, Clint Stockley, Fred Thorsteinson and Robert Zwick.

From the great mass of detail presented, some of the more striking points brought out were as follows:

Mesh Is Great Factor On Bristol Bay

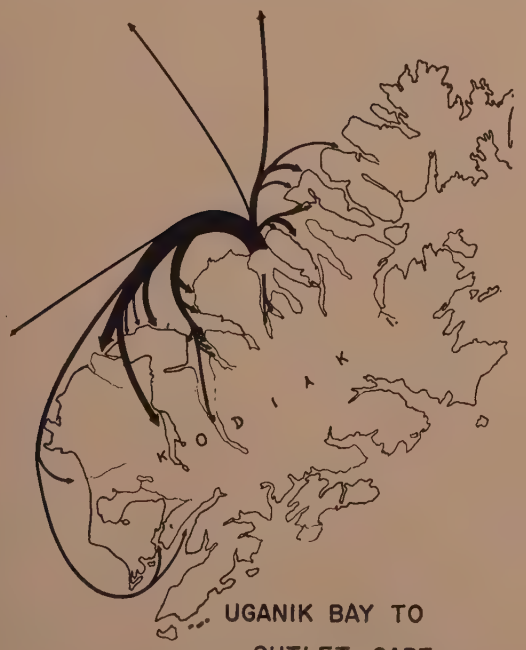
In the Bristol Bay research, an immediate objective has been to follow the run through the commercial fishery to the escapement on the spawning grounds and resultant young in the lakes, with analysis of the effects of various factors, especially mesh size. This has made it clear that *spawning escapement is the result of volume of the run, and the relation between sizes of fish in the run and sizes of mesh used;* the latter being a far more important factor than amount of fishing effort.

This conclusion is based on three seasons of practical mesh experiment, accompanied by extensive tagging, conservation on the spawning beds, and consideration of all phases of the life-history of the species. In any year, very few Reds of the sizes caught by standard gear are found in the escapement. In years when they run small, escapement is heavy; when large, it is light.

At the same time, it is found that the males consistently run larger than females; while the predominant sizes of both sexes vary considerably from year to year. Thus, with standard gear, a great part of the smaller fish in the 1947 run (mostly females) escaped capture—but a little smaller mesh would have taken most of the females both in 1946 and 1947, with devastating results to the future.

On the other hand, larger mesh normally catches more of the males, permitting more females to escape. Most desirable size of mesh to use in any year is thus dependent on predominant size of fish in the run, and amount of escapement desired.

How salmon tagged at Uganik Bay were recovered at widely separated points is shown by this sketch, in which the width of lines is proportionate to the numbers of tagged fish recovered. Note how few fish were recovered in Uganik Bay itself.



FERTILIZATION EXPERIMENT

PICK CREEK - 1948

♂ : ♀ SEX RATIO	NO. EGGS RECOVERED	% LIVE EGGS
3 : 1	7,692	99.52
1 : 1	5,272	99.34
1 : 5	13,742	92.36
1 : 7.5	21,405	95.03
1 : 10	47,773	95.84
1 : 15	42,110	95.51
	NATURAL REDDS	
1 : 1.3	30,444	99.37

In the sex ratio column of this graph the figure for the proportion of males is given first, followed by that for females. Note that one male successfully served as many as 15 females, with no great decrease in the percentage of fertile eggs; and that in the natural spawning the sex ratio is one male to 1.3 females.

Surplus of Male Reds

It was proved by experiment in breeding pens that male Reds will each serve several females where the latter predominate in numbers. *Where one male was confined with as many as 15 females, all the eggs were normally spawned, all the nests were served, and over 95% of the eggs were found fertile.* Females held apart from males spawned, but none of their eggs were fertile.

Thus it appears that the run normally includes a large percentage of males not essential to propagation, which could be taken (and in some years are by present gear) without detriment to the run. By control of mesh size, then, it should be possible to regulate not only the catch and escapement, but the relative percentage of the sexes in the escapement: to permit more females to spawn, and put the surplus males into cans, as Pribilof Island sealskins are taken mainly from surplus male seals.

The "sticker" lies in the year-to-year variation in

size, which would not only call for frequent changes in size of mesh but, if such control is to be properly exercised, would require the ability to forecast well in advance the sizes of fish that will predominate in any year's run. This highly complex problem is now under intensive investigation, with study of all details of freshwater life of the young, its bearing on the ages and sizes of returning adults, and all other possible factors.

Predators Cause Heavy Loss

Losses to the escapement due to predators were found strikingly heavy. Gulls are especially destructive in shallow streams, where the ascending fish are exposed: in one such creek, they killed about 45% of the tagged fish within five days after tagging. Bears, on Bristol Bay as well as Kodiak, kill great numbers of spawners; and belugas are very destructive in the bays. Other losses of importance result from untimely low water in many creeks, obstruction by beaver dams, and predatory fish in the lakes.

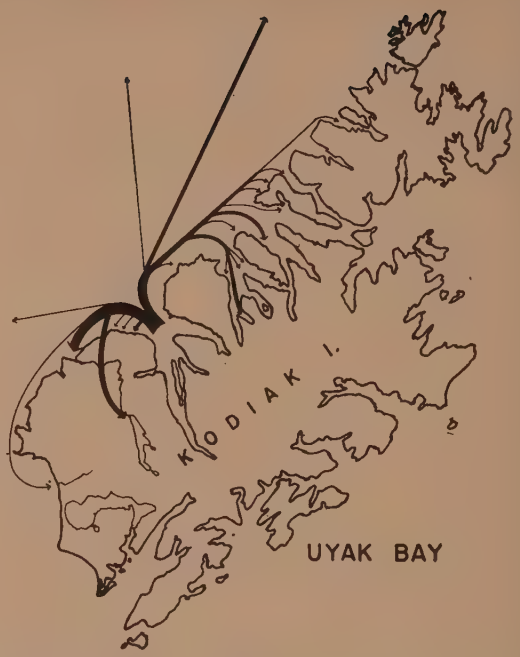
For Bristol Bay the presentation covered mainly work done in the Nushagak sector, from Ekuk to the headwater lakes of the Wood and Nushagak rivers. Much has also been done, however, in the Kvichak-Naknek, Egegik and Ugashik sections; and the results in all parts of Bristol Bay are applicable, in general, to the entire area—and to a great extent to the Red runs in all parts of Alaska.

Some phases of the Bristol Bay investigation are being carried on throughout the year, summer and winter; and much interest was added to the presentation by a remarkable collection of color photos of the fishery, spawning salmon, and the equipment, travels and activities of the field crews.

No Distinct Routes Of Salmon Migration

One interesting result of large-scale tagging in all districts covered—notably in the Kodiak and Southeast

Extraordinary migration route of a tagged Pink salmon which actually was recaptured three times at points far distant from that of tagging and of final recovery.



Migrations of salmon tagged at Uyak Bay to numerous points along the Shelikof shore of Kodiak Island, and notably to Karluk are shown in this sketch. Width of lines proportionate to number of recoveries.

Alaska areas—was refutation of the old idea of distinct routes of migration of the runs to various streams. Everywhere, as to *both Reds and Pinks,* much random and "opposed" wandering—to and fro, up and down—was encountered, although each run or race of fish ultimately winds up on its own proper spawning ground.

The Kodiak program, started in 1948, has been on a considerably smaller scale than on Bristol Bay; but its basic problems are quite similar to those on Bristol Bay as to Reds, and to Southeast Alaska as to Pinks. The work here commenced with a substantial background of information from past studies by the Fish & Wildlife Service, with weir counts of Karluk escapement since 1921.

The new research has shown some interesting and significant facts, though most of them are yet to be interpreted as to practical application and bearing on management.

Three Runs On Kodiak

Most important, perhaps, is the fact that the Red season long showed three distinct runs: early, mid-season and late. Recent records show a marked decline of the mid-season run—the early part being fairly well maintained, while the late run is not fished.

Strong evidence from several sources indicates that most of the catch is from the mid-season run; escapement is mainly from the early run, with a substantial percentage from the late-season, but very little from the mid-season. These points apply, in general, to both Karluk and Alitak; and they are consistent with observations on the Fraser River and elsewhere, as to distinct "races" of Reds running at different times.

Tagging indicates that these "peaks" are actually separate runs. The relation between escapements in different parts of the season, and the returns of their progeny at maturity, is being investigated further.

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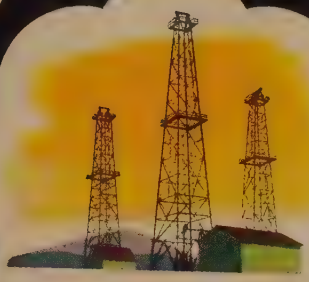
LOGGING

TRANSPORTATION

MINING



PETROLEUM

MANUFACTURING

MARINE

CONSTRUCTION

Tagging reveals much random movement of the Karluk fish along the west side of the area. Reds tagged all the way from Afognak to Karluk were later recovered (and released) on Raspberry Strait, and finally caught in the Karluk district; and the spawning return to Karluk Lake is from a wider area of the fishery than had been supposed. At the same time, Reds tagged all along the west side also returned to Afognak. Numbers of these tagged fish recovered outside of the Kodiak area were insignificant, a few on Cook Inlet, and fewer yet in Chignik, Peninsula and Bristol Bay waters.

Southeast Catch and Escapement Vary with Run

All available data in Southeast Alaska seem to indicate some other factor than the fishery as mainly responsible for the fluctuations in abundance, leading to the question whether physical conditions may not be the determining factor; whether some change in these conditions has not had much to do with the apparent depletion, especially of the early runs. Studies are therefore being focused largely on effects of the physical environment.

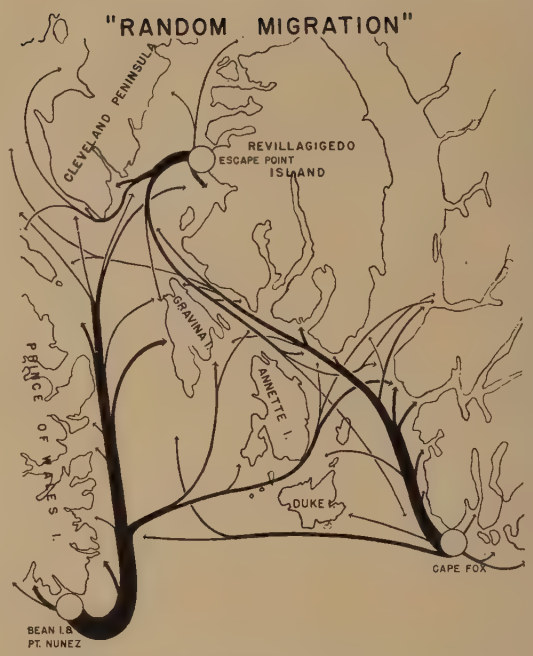
Catch and escapement both seem to fluctuate simultaneously with the total volume of the run: in years of large catch, the escapement also is large, and vice versa. Further, there is no apparent correlation between the volume of any run or escapement and the return of its offispring at maturity. The tendency is distinctly toward a leveling-off: heavy escapements are commonly followed by mediocre returns; light escapements, also, often by fair average returns.

Overcrowding of spawning streams definitely does occur at times. Specific instances were observed in 1949, when Snake Creek and Olive Cove were seen heavily congested with Pinks, many of which died without spawning.

Southeast Alaska is far from being a single unit. Different sections show striking differences in the pattern of annual fluctuations, as well as in patterns within the season, with greater decline in the northern part. In each section or district, the run as seen in both catch and escapement seems to be from the spawning grounds of that district.

CONTRASTING MOVEMENT

PINKS TAGGED FROM BEHM CANAL & DAVISON POINT



MOVEMENT OF PINKS TAGGED AT CAPE CHACON, ESCAPE PT. & CAPE FOX

For instance, most of the tags recovered in 1947 from some 23,000 fish, tagged in the Cape Chacon-Behm Canal-Cape Fox area, were taken within that area; less than ½% were recovered north of Cleveland Peninsula, and less than 1½% in British Columbia. Within each district, however, the fish wandered widely before entering their streams.

On the other hand, fish from each tagging point were recovered in many streams, and in all streams fish from many tagging points were recaptured; and it appears in general that Pinks bound for most spawning grounds of a district pass through all parts of the fishery in that district, and the catch at any point includes fish from every creek in the same district.

Throughout Southeast Alaska there is clear evidence of distinct lines between early, mid-season and late Pink runs, though there seems to be a consistent difference between streams as to time of spawning; the run of one creek may come at quite a different time from that in adjacent streams. Further, the time of the spawning run in any stream tends to be consistent from year to year.

A good share of the present studies, as indicated above, is concentrated on the effort to determine accurately the relation of various physical factors to fluctuations in the survival and return from the spawning. So far this has been undertaken on only a few streams: to obtain significant results, it will probably be necessary to extend this work to many streams and continue it for some years.

(Further reports on the Research Conference appear on Pages 37 and 39.)

BRIGHT SKIES FOR TUNA

In an amazing reversal of form, the Southern California tuna industry has emerged from the gloom of last December into bright sunshine of optimism before the end of March. In fact, it overdid the turnabout somewhat; and the country may be facing a real shortage of canned tuna before the end of April.

Within two months the gloomy outlook for 1950 changed. A heavy carryover of probably 1,500,000 cases, which had created lay-ups for the fishing fleets up to as high as 90 days in port, was about gone.

What happened? In the first place, canners of advertised brands dropped quotations around $1 per case in December. Retail prices got down below 40c mark for Light Meat, solid pack, and down into the lower 30s for the chunk style this pack was offered as a "lost leader" at 29c.

January Movement Heavy

The consequence was that canned tuna moved heavily in January. Some packers declared the movement was double that of January, 1949. The big surplus began to fade like morning mist. Lent began February 22 and packers started taking inventory of warehouse and spot stocks, and figured their potential tonnage to the end of April, when the first cycle of 1950 trips would be completed.

By that time last year the Southern California industry had produced approximately 1,300,000 cases.

How about the same period this year? Figure how they might, they couldn't see more than 23,000 tons for the months of March and April from the tuna clipper fleet. The purse seine fleet was getting into full swing, but its tonnage is always uncertain and last year's net yield to the end of April was not impressive.

It takes around 25,000 tons of tuna to produce a million cases. By the end of February, 500,000 cases had been produced. About all that could be expected—not counting the purse seine fleet, which might yield a few thousand tons—was another 850,000 cases, or around 1,400,000 cases for the first one-third of the year.

Some packers felt a definite shortage of canned tuna was to be expected before the heavy tonnage season arrived. Further, fishing at the southern banks was spotty—not at all like the good fishing that started off 1949. "Local", or Mexican banks were yielding poorly.

As March got under way packers removed all in-port restrictions from the fleet and were getting their fleets out to sea as fast as possible. In February 71 clippers arrived and 56 departed. For early season trips the long-range clippers were requiring from 75 to 90 days, and short-range vessels from 40 to 50 days. For the first week in March, San Diego received only 224 tons.

Tuna Market Prices

The national sales market was stronger March 1 than it had been for more than a year. There was no canned Albacore, except that which packers of nationally advertised brands would normally stock to supply the trade until the new pack is available in July.

Light Meat, solid pack, advertised, was quoted at from $14.75 to $15.25; chunk style, advertised, $12.50 to $13.00. Private label, solid, $13.25 to $13.75; chunk style, $11.00 to $11.75. Grated was generally quoted at from $10.25 to $10.75. A cross section of retail prices across the country shows Light Meat, solid pack, advertised, selling at 39c; chunk style, 35c. Special mark-downs on solid as low as 35c, advertised, and on chunk style to 29c.

At such prices packers believed the consumer market had tapped a lower and dense buying strata, and this promised well for the balance of the year. Becoming realistic about canned tuna—that it has finally become a staple grocery item, instead of a luxury—the price on grocers' shelves has been brought into line with the times, they declared.

The Pacific Coast market still retains its dominant position, but the Middle West and Eastern seaboard are consuming more and more canned tuna. Packers do not believe this is mainly because the product is now within buying reach of many more people, but also because those who are already consumers, are using canned tuna more frequently.

L. A. Tuna Seiner Fleet Squares-Away for '50

Clipper tonnage contributed the largest share of Los Angeles-Long Beach harbor February tuna, with approximately 853 tons of Yellowfin and 718 tons of Skipjack, as compared to 356 tons of Yellowfin and 80 tons of Skipjack from purse seiners. Bluefin made a showing in February when 419 tons from Guadalupe came to port.

March to the 10th yielded approximately 726 tons of Yellowfin, 457 of Skipjack and only 67 tons of Bluefin.

Purse seiners in early March were finding tuna at Los Frailes and near Acapulco. *Cesare Augusto, Cavalieri, Jackie Sue, Gallant* and *C. R. Martinolich* were fishing for the *Tinian,* Columbia River Packers' mothership stationed in Central America. In addition to these San Pedro vessels, there was the *Swiftwater* from Astoria.

Van Camp's *Spicewood* was scheduled to take tuna from the seiners *Columbia, City of Los Angeles, Discovery* and probably the *Yankee Clipper.*

In the last half of February 34 purse seiners cleared custom for the tuna grounds of Mexico and Central America. Tuna from Peru, brought by steamer to Terminal Island, was processed by several canneries in February, and Van Camp's tuna facilities were occupied with tuna trucked from San Diego.

Los Angeles-Long Beach warehouses of major canners during early March were emptied of tuna as the demand for this fish increased all over the country. Departing freight cars, loaded with cases of all grades, gave packers and brokers alike a sense of optimism for the remainder of 1950.

At San Pedro tuna vessels were leaving with a letter of guarantee replacing verbal orders from canneries. The price remained at $310 for Yellowfin, $300 Bluefin, $290 Skipjack.

POWERED BY Superior for sure starts

Behind the alert, surging power of Superior Marine Diesels is a reputation for economy and long life. One reason for this fame is Superior's strong backbone.

Superior's big, husky crankshafts are forged from a solid billet of heat treated steel. Then they are machined to watch-like precision that's well within the tolerance requirements of the American Bureau of Shipping. Superior crankshafts are so carefully balanced that one man can easily turn one that weighs 5500 pounds by hand when it is placed in the bearings of the engine bed plate.

SUPERIOR ENGINE DIVISION
THE NATIONAL SUPPLY COMPANY
Plant and General Sales Office: Springfield, Ohio

Here are other reasons why Superior is your best buy—

1. Conservative Ratings
2. Fuel Economy
3. Precision Bearings
4. Strong Bases and Cylinder Blocks
5. Proved Roller Chain Camshaft Drive
6. Oil Cooled Pistons.

One of our representatives will be glad to show you how these features can help you. Just write and tell us when he can call. Or, if you prefer, send for our fully illustrated, 28 page booklet.

THE NATIONAL NSCO SUPPLY COMPANY

Superior DIESELS built for marine service

Power Boats Permitted on Bristol Bay Effective With 1951 Salmon Season

Use of power boats of 32' or less for Bristol Bay gillnetting will no longer be prohibited *after this year*, and is now permitted (without the length restriction) in the Chignik and Kotzebue - Yukon - Kuskokwim areas.

This announcement, which will involve a complete rebuilding and re-equipment of the great Bristol Bay fishing fleet, was the only real surprise to the industry in the 1950 Alaska fishing regulations, the new features of which were released March 7 by Oscar L. Chapman, Secretary of the Interior.

It came as something of a surprise in view of the declaration at the November hearing, that no such change would be made until Congress had acted on the proposal to authorize control of amounts of gear used; but that policy was enunciated by Mr. Krug, who was soon afterward succeeded by Mr. Chapman as secretary.

F A W S Position Explained

Explaining this radical change, the Fish & Wildlife Service says:

"Advisability of replacing the traditional fleet of gillnet sailboats with motor boats has been the subject of controversy for several years. It has been contended on the one hand that the conservation of salmon runs would be threatened by such a technological advancement, and on the other that this obsolete method of transportation is made efficient by the current practice of supplying a large number of auxiliary vessels for towing purposes.

"However, the Fish & Wildlife Service now possesses sufficient enforcement facilities and scientific knowledge to protect the runs against undue depletion, despite the type of motive power utilized in the fishing boats . . . The one-year delay is provided to give everyone equal and ample opportunity to effect the change-over, if desired."

This year's active Bristol Bay fleet is expected to number 426 centerboard boats propelled by sail and oars, but in some recent years has included 1200 such craft. How many power boats will be required for the same service in 1951 is not yet known.

For the current season Bristol Bay, with little formal regulatory change, faces the semi-official curtailment of gear to about 60% of that used in 1949; slightly over 60% of the ten-year average. Stake and set nets are restricted to a zone within 150 yards of high-tide mark, with some restriction, notably on the Nushagak; and the Hagemeister district is no longer included among the fishing areas.

Southeast Alaska On "Austerity" Basis

Southeast Alaska, as anticipated, continues on substantially last year's austerity basis: official opening date in northern sections is advanced a week, from Aug. 22 to Aug. 15,, as was done by readjustment in 1949, making the summer season throughout the area Aug. 15 through Sept. 3 —with the standing provision for "quickie" adjustments in accordance with the Pink run, and possibility of earlier local openings as well as later closing if the run seems to warrant.

Copper River gets a little longer Red season, closing June 20 instead of the 15th. Prince William Sound returns to its short even-year season of 13 fishing days, July 20-Aug. 7, and Cook Inlet gets its even-year increase of four days at the close.

Kodiak restrictions seem less hard-boiled than was first proposed. The entire area loses two weeks of mid-season fishing, July 15 through 30 (except for certain Red sections); but the Karluk, General and new Mainland districts keep their June Red season starting the 6th, and the entire area is open from July 31 to Aug. 13—making a season of about 7 weeks in all. A new Afognak district is closed to July 10; Alitak to July 5, as last year, with set-netting in Olga and Moser bays permitted from then to Aug. 20.

Trap Sections Dropped

Among the changes of general significance, Sections 102.21-22-23, relating to native rights, filing of trap locations, and competing trap claims, are omitted; and traps are so defined that any other device operated in the manner of a trap is subject to all trap regulations.

Requirements as to boat registration, identification, etc., are tightened, with daily catch reports required at a number of points. All boats and processing operations must be registered in advance with the "local representative" of F A W S for their initial area of operation, with detailed information as to type of vessel, crew, gear, etc.; and must also re-register before moving to another district. Representatives receiving such reports will be at Anchorage, Chignik, Cold Bay, Cordova, Craig, Juneau, Ketchikan, Kodiak, Naknek Airbase, Seward, Sitka, Wrangell and Yakutat.

Bristol Bay gillnetters of each owner's fleet must be numbered *serially*, with letters 12" high (instead of 6"), and marked to show locality of operation. Boat and gear identification requirements are also changed in some other areas.

The minimum-size limit for King salmon, formerly applied only to troll fish, is extended to all gear.

Yakutat is now a distinct *area* by itself, from Cape Fairweather to Cape Suckling—now including Icy Bay, which was formerly combined with the Bering River area. It is entirely separate from Southeast Alaska, which is re-defined as from Dixon Entrance to Cape Fairweather; and the Yakutat regulations are completely rewritten, with many changes in detail. Opening date is delayed from June 18 to July 1 except for King gillnets in Dry Bay, which start June 1 instead of May 15.

Longer Closing Threatened In Cook Inlet Area

Among the more important changes of local application are the following:

On Cook Inlet, spacing between units of gear now applies to driftnets and seines as well as set-nets; and it is noted that the "tremendous increase in gear" in this area "is causing grave concern," resulting in studies to determine the amount of weekly closed time to compensate for any further increase this season. "Compensatory weekly closing," it is declared, "will be imposed if there is any increase in intensity over 1949."

Opening date for Resurrection Bay is set back from June 1 to July 1. On the Peninsula the Thin Point closed area is increased; but it is

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Patapar Vegetable Parchment is famous for its wet-strength. Soak it, drench it—even boil it. Patapar comes out strong and glistening.

But wet-strength is just one of Patapar's qualities. This unique paper is produced in 179 different types. Each type has special qualities to meet special problems.

Do you want a paper that resists grease? A paper that is odorless? Tasteless? One that is air tight? Patapar can help you. The 179 types fill varying requirements of wet-strength, grease-proofness, opaqueness, moisture vapor resistance, pureness and many, many other qualities.

Some of its uses

Patapar is wonderful as a wrapper for protecting foods like butter, bacon, fish, cheese, margarine, poultry. It is used for making lampshades, beautiful greeting cards, for rubber mold liners, putty wrappers, artists' sketching pads.

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intimated that, if early escapement is good at Port Moller, the local closing date *may* be extended beyond Aug. 5.

Port Snettisham and Stikine gillnet areas are enlarged, with Burroughs Bay at the mouth of the Unuk open to gillnetting through the seining season; but Snettisham gillnets are cut from 250 to 150 fathoms, result of the recent increase in numbers. Only gillnetters in the Stikine district now need make daily reports from June 25 to Aug. 15.

Wrangell Narrows beach seining is more rigidly described; boundaries of the Sumner Strait district are re-defined, and some slight changes are noted in gear restrictions for the south arm of Behm Canal.

Many other changes not covered here have been made in phrasing and arrangement of the regulations, with minor modifications of restrictive detail, so that all operators should carefully examine the official text, which should be available by the time this appears.

April 15 is Last Call for HAND-I-BOOKS

Final date on which orders for copies of the second edition of the PACIFIC FISHERMAN's *Canned Fish Hand-i-Book* can be accepted is April 15.

Numerous requests have been received from the distributive trade for additional copies of this Hand-i-Book, which was published originally as a supplement of the 1950 PACIFIC FISHERMAN YEARBOOK, and also made available as a separate booklet.

Orders received following appearance of the Hand-i-Book greatly exceeded the original printing, and it is expected that there will be sufficient demand to permit a second edition.

However, all orders must be received by PACIFIC FISHERMAN, 71 Columbia Street, Seattle 4, Wash., by April 15.

There will be no subsequent edition.

Prices of the Hand-i-Book on second printing are as follows: 1 to 24 copies, 32c each; 25 to 999 copies, 27c each; 1,000 or more copies, 24c each.

Special envelops to fit the publication can be furnished if desired at 2c each additional.

Salmon Line Holds Firm; Counter Attack Expected

Looking back from mid-March, it seems that the February price drop in Pink and Chum salmon might be described as a "retreat to prepared positions." The new line has been strongly—even aggressively—held. Up to presstime no "counter-attack" had developed, but was expected momentarily.

The drop was followed by a really heavy buying movement—the first since last fall—both for direct shipment and from consigned stock. This has cleaned up most large offerings of good-quality Pink talls on the Coast: there are said to be practically none left except in the hands of two or three large concerns, whose supply is closely held for their regular trade, with very few available for the open market. Some sellers, indeed, have been actively buying.

Consigned stocks in general are said to be still quite substantial, though closely cleaned up in some markets. Retailers at many points have cut their profits to the quick, with low prices resulting in a heavy consuming movement.

Pinks were withdrawn from the market Feb. 27 by Deming & Gould, followed by several other large sellers, and some are still withdrawn at this writing. Talls have continued available from a number of sources in limited quantities at $14.75; but how much is of really desirable quality is uncertain. Little is currently heard of "pale Pinks," and it is hard to find any as low as the $14.00 quoted a month ago.

Buying interest has subsided a little lately, but through late February-early March buyers were eager to cover their spring requirements, with deliveries to the end of March. These needs are now pretty well covered, but the trade has shown no desire to anticipate summer needs; and Coast stocks have been reduced to such an extent that they may have difficulty in doing so later.

Other Items Scarce

Chum talls are nearing a clean-up, with all the larger holders believed to be sold out, though some are still available at $14.00. Only a few scattered lots of Chum halves are left, being nominally quoted at $9.00, but hard to find and of uncertain quality, and the same may be said of Pink halves at $10.00.

Aside from Pinks and Chums there is nothing of any consequence on the market: Reds, Sockeyes, fancy Chinooks long since sold out, and values of other items largely nominal. About the only goods left are Medium Reds and intermediate-grade Columbia River Chinooks. Coho halves are out, and first-class talls seem to have been cleaned up some time ago at $22.00, though occasional small offerings of Medium Reds continue to appear at $21.00.

Thus the over-all canned salmon picture begins to look pretty "tight," and will no doubt grow tighter yet as the summer approaches—with no new stock worth mentioning due to appear before August, and few Pinks before September or later.

Sardine Brokers Named

Monterey Sales Co., San Francisco, sales managers for Oxnard Canneries Inc., and Aeneas Sardine Products, Monterey, have appointed a number of brokers in several territories they were previously unable to cover on account of the scarcity of sardines.

Sacramento Fresh Salmon Priced at 28c

Sacramento and San Joaquin river salmon fishing was proceeding under a slow bell last month. Catches were small. Fishermen were getting 28c-lb. round.

ACCENT ON COMMUNICATIONS

That's the Outstanding Feature of this Outstanding Clipper

Communication capabilities of the tuna clipper *Hortensia-Bertin* are among the outstanding characteristics of this new clipper which swung out of Commencement Bay Feb. 8 bound for the tuna seas.

Capt. O. E. Bertin, owner of the vessel, stinted not in any aspect of the craft, and directed her designer, Arthur DeFever of San Pedro, to provide in the fullest measure for adequacy of communications — between clipper and clipper; clipper and bait tender; clipper and home port; captain and lookout, engineer, galley and bait tanks.

So when you take a look at the *Hortensia-Bertin* and seek those aspects of distinction which mark her among other clippers, you come-up with the feeling that it is in the field of communications that she is outstanding.

Tuna Tender Equipped With Radio Telephone

What are the details of this unusual communications capacity of *Hortensia-Bertin?*

She carries, of course, the usual radiophone and code instruments, a Northern Radio sending set and a National receiver. This latter instrument is a Model HR07, with four removable band spreads, giving extraordinary ability together with extreme compactness.

In addition, the vessel's speed-boat bait-tender, an 181 Chrysler-power Western "Fairliner," is being equipped with a radiotelephone, so

Capt. Arnold Azevedo, master of *Hortensia-Bertin*, left, with Chief Engineer Frank Hawkins in the clipper's pilot house.

STANDARD ENGINEER'S REPORT

DATA

LUBRICANT RPM Delo Oils

UNIT 275 H.P. Union diesels – 6 cyl. 11" x 15" M.V. Komoku

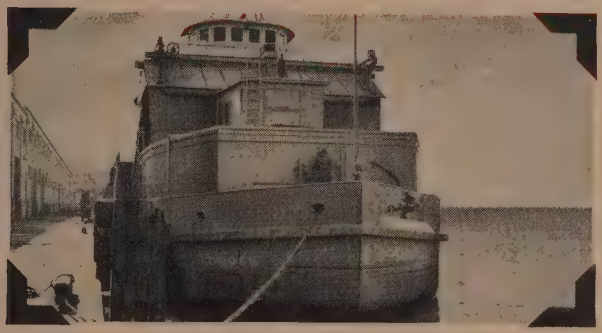
LUBRICATOR Dry sump

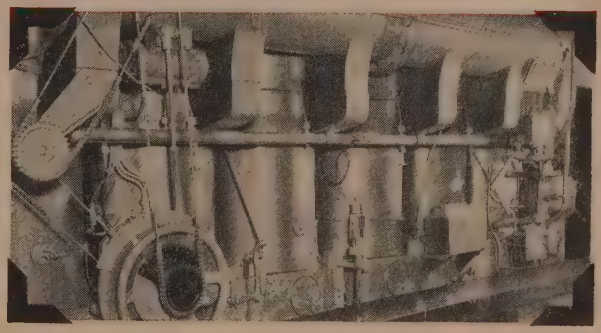
CONDITIONS Intermittent operation. Capacity loads against strong tides

PERIOD 12 years

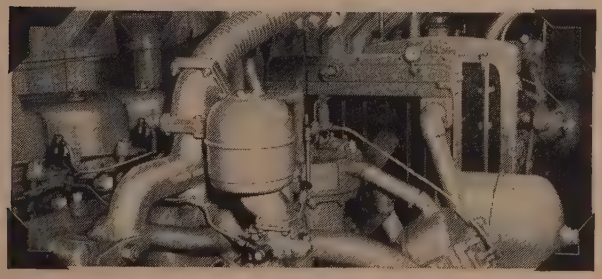
FIRM Bay & River Navigation Co., San Francisco

No stuck rings or bearing failures in 12 years!





HAULING 900-TON-AVERAGE LOADS, the M. V. Komoku's two 275 H.P. high-speed diesel engines have been lubricated with RPM DELO Oils since the vessel was built in 1938. "In all that time," says Chief Engineer R. B. Gibson, "we haven't had ring or bearing trouble. About 5 years ago we pulled the pistons, but there was so little wear we only installed standard rings. We grind exhaust valves yearly, intakes every two years." RPM DELO Heavy-Duty Lubricating Oil keeps these engines clean and lubricated.



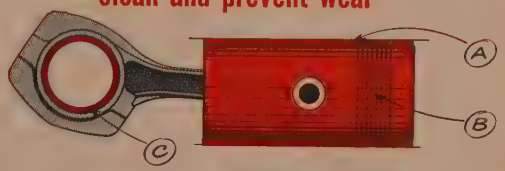
FIVE CATERPILLAR AND BUDA DIESELS are also on the M. V. Komoku to operate air compressors, generators, etc. . . . are lubricated with RPM DELO Heavy-Duty Oil. In varying periods, RPM DELO Oils have prevented ring, cylinder or bearing trouble in any of them.

REMARKS The M. V. Komoku transports sugar from upper San Francisco Bay to various terminals. Strong tide flow, common in the Bay, often makes heavy going for her engines.

RPM DELO Oils are designed to meet every heavy-duty engine need. Besides RPM DELO Heavy-Duty Oil in the Komoku, the other high-performance grades are RPM DELO Special, RPM DELO Supercharged–1, RPM DELO Supercharged–2 Lubricating Oil.

RPM DELO LUBRICATING OILS

How RPM DELO OILS keep engines clean and prevent wear



A. Contain special additives that provide metal-adhesion qualities . . . keep oil on parts whether they are hot or cold, running or idle.

B. Anti-oxident resists deterioration of oil and formation of lacquer . . . prevents ring-sticking. Detergent keeps parts clean, helps prevent scuffing.

C. Special compounds stop corrosion of any bearing metal, and oil foaming in both wet and dry sump engines.

STANDARD TECHNICAL SERVICE checked this product performance. If you have a lubrication or fuel problem your Standard Fuel and Lubricant Engineer or Representative will give expert help; or write Standard of California, 225 Bush St., San Francisco 20.

Trademark "RPM DELO" Reg. U. S. Pat. Off.

STANDARD OIL COMPANY OF CALIFORNIA

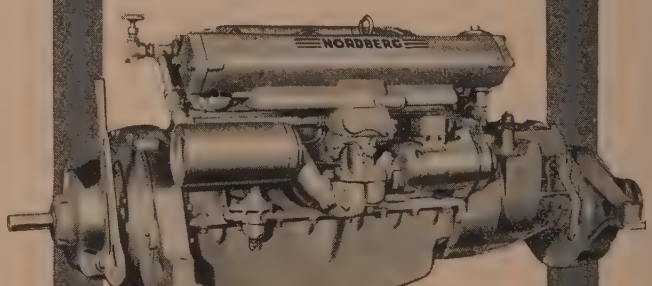
No more fouled seines or nets . . .

Thanks to the **NORDBERG STA-NU-TRAL CLUTCH**

The 28 ft. Santa Cruz sardine boat SONNY BOY is owned and operated by C. "Trouble" Ghio (right), with the help of his son, John (left). Boat is powered with a Nordberg Model 230, driving a 23" x 18" wheel through a 2.44:1 reduction gear.

AROUND Santa Cruz, California, sardine fishermen have to be mighty careful to see that turning propellers don't foul their expensive seines. Now, thanks to the ***STA-NU-TRAL*** Clutch available with Nordberg Gasoline Marine Engines, this danger of tearing seines or nets is practically eliminated . . . because propellers are stopped *dead,* even while the engine is operating the front-end clutch power take-off used to handle the seine rolls.

Here, then, is a *plus* value you get only with dependable Nordberg Gasoline Marine Engines. See your Nordberg Marine Representative for full details, or write for a copy of *Bulletin 143-B.*



NORDBERG Gasoline Marine Engines are built in 3 heavy-duty models, from 50 to 135 H.P. for direct drive or with reduction gear ratios of 1.88, 2.44, 3.32 and 4.12 to 1.

NORDBERG MFG. CO.
MILWAUKEE 7, WISCONSIN

G550

BUSCH-SULZER
A DIVISION OF NORDBERG

NORDBERG
DIESEL and GASOLINE ENGINES

the bait crew can communicate with the clipper, reporting their fortunes or plans; and the master of the *Hortensia* can direct the bait-seeking tender.

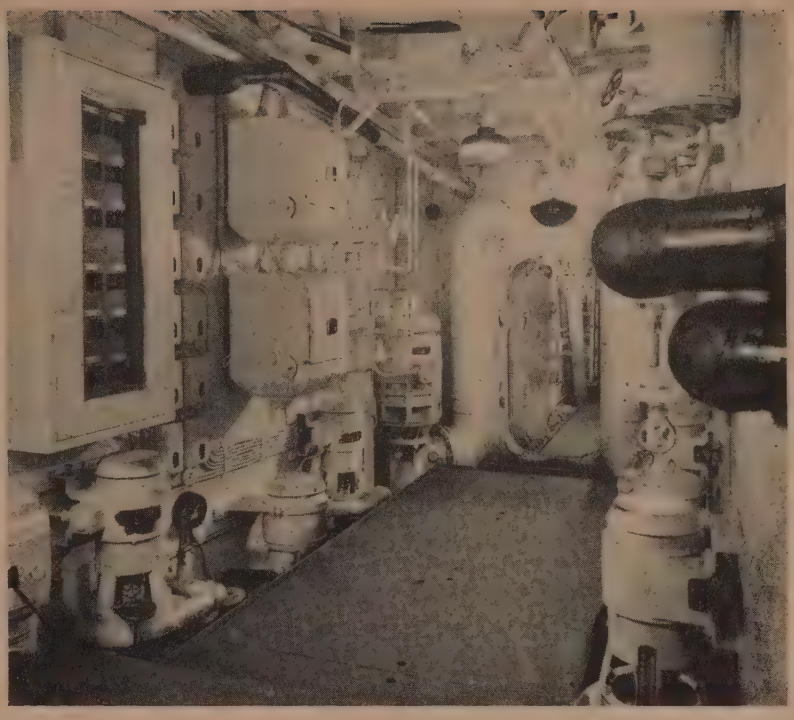
Incidentally, the tender is also being equipped with a Fathometer. Capt. Arnold Azevedo, master of the clipper, expects that this will prove of real use in locating schools of bait fish, as well as in protecting the tender and her lampara net in the inshore waters where the bait fishing is best.

Selective-Signalling Radio Telephone Equipment Installed

Another feature of the communications equipment of *Hortensia-Bertin* is the installation of high-frequency selective-signalling facilities. This gear is being put on the vessel in cooperation with the Pacific Telephone & Telegraph Co.

This equipment makes it possible for the shore station at the vessel's home port to call the clipper at any time, the call ringing a bell in the clipper's chartroom in the same manner that an in-coming telephone call is signalled ashore.

The bell rings whether the vessel's radio is in use or not, and regardless of the wave-length to which it may be tuned at the time.



This view in the engineroom bay of the *Hortensia-Bertin* is significant from a number of points of view. Switchgear on the left is hung on the bulkhead of one of the steel combination fuel and cargo wells — other one opposite. Note the Fairbanks-Morse brine circulating and fuel pumps in the foreground, and the big vertical F-M bait pump beside the w.t. door opening into the shaft alley. Of particular significance is the arrangement by which the bait water headers are carried up above the door and along the upper portion of the shaft alley. The fanshaped item above the door is a clinometer, so the engineer can know how far she's rollin'.

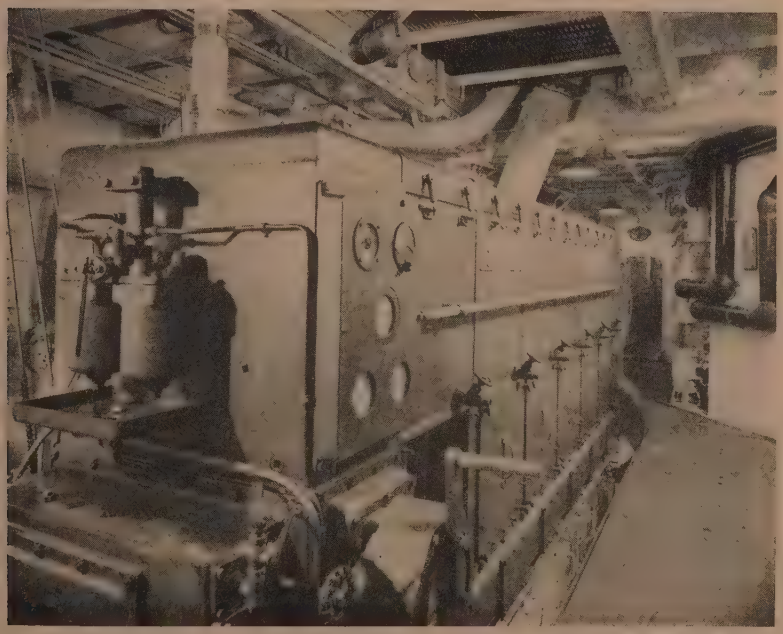
Intra-Craft Communications

Special emphasis has also been placed on communications between the several operating stations of the clipper. An intercom system in the pilothouse gives one-way communication with the engineroom, galley and bait tank; and two-way talking with the crowsnest.

Supplementing this system are speaking tubes between the pilothouse and the crowsnest, and also with the interesting and unusual house-top station with which the craft is equipped.

Atop the pilot house is a Northwest Instrument binnacle and standard compass, with speaking tube outlet.

Here's the 465-hp. Superior diesel engine which drives *Hortensia-Bertin*. It is a 6-cylinder engine, operating at 450 rpm., and is identical with the power plants in a number of Tacoma-built tuna clippers similar to *Hortensia* in size and line.



Laminated Bulkheads Used

This interesting clipper was built by Tacoma Boat Building Co., which a few months previous delivered a steel clipper to Captain Bertin.

Hortensia-Bertin is heavily-built of wood, is 103′ in length and 25′ 10″ in beam. Her hull is identical in model with that of *Coronado*, also designed by Mr. DeFever, and built by Peterson Boatbuilding Co., Tacoma. Superstructure and equipment were of course modified in accordance with Captain Bertin's requirements. Notable among these changes is that which provides accommodations for a crew of 20.

Structurally, the point of greatest interest about the vessel is the use of laminated, glued bulkheads for the bait and cargo wells. This con-

This introduces the Northern cargo hoist, newest item in the Tacoma Boatbuilding Co.'s "Northern Line" of fishing vessel deck gear. It is a compact, but powerful unit, equipped with a push-button remote controller, and specially-built to handle the hoisting needs of fishing craft.

struction was used by Mr. DeFever first in the *United Victory*, and has proven very successful from the standpoint of cost, effectiveness and strength.

The laminated bulkheads, which are pre-fabricted of planks, laid diagonally, paved heavily with waterproof glue, and then spiked, eliminate the necessity of caulking. Moreover, they are tight, do not leak in service, and add materially to hull-strength of the vessel.

Engineroom Equipment Has Distinctive Features

Hortensia-Bertin carries a 465-hp. Superior main diesel engine, turning her Monel metal shaft in a Goodrich cutless rubber bearing. Auxiliary power comes from three General Motors diesels, each driving a 60-kw. generator. Two of these auxiliaries are located in engineroom and the third in the refrigeration engineroom above.

The engineroom contains a freshwater evaporator which furnishes about 8 gals. of water per hour from seawater.

An interesting item of equipment in the vessel is a lube oil pump driven continuously by a quarter-horse motor to provide continuous filtering for all lubricating oil, while at the same time maintaining positive lube oil pressure.

Fairbanks-Morse pumps and motors are used throughout the vessel. Three duplex refrigeration compressors will freeze and hold tuna to the vessel's capacity of 175 tons.

Frank Hawkins is chief engineer.

Instruments and Deck Gear

Hortensia-Bertin is steered manually through a Sperry steering stand, with remote control from the bridge wings; and working through a Sperry electric steering engine located in the engineroom.

The chart room carries a Kaar direction-finder and the pilot house a 1,000-fathom Fathometer, as well as a Weston tachometer.

The vessel is fitted with one of the Tacoma Boatbuilding Company's new "Northern" cargo hoists, and with a "Northern" anchor winch.

Fishing racks on *Hortensia-Bertin* are equipped with the spray feature which Captain Bertin specified for her fleet-mate *Yolande-Bertin*. The pipe rail on the racks is perforated to provide a fan-shaped spray like that which Captain Bertin has seen Japanese tuna fishermen in the Orient use with good effect in fishing Skipjack. Each rack is connected with a pressure water line by a short length of hose, which permits it to be laid aboard without hindrance from the water connection.

Port of Seattle Restores Cold Storage

Extensive damage suffered by the Port of Seattle's cold storage facilities at its Spokane Street Terminal during the 1949 earthquake have completely repaired, and the building entirely renovated.

The remodeling job at the cold storage plant cost $60,000, and included damage repair, renovation, complete repainting and installation of a high-speed elevator system to replace the old equipment, which was destroyed by the earthquake.

Earley also announced that the Port of Seattle plans to spend $600,000 to expand present fish house cold storage facilities at the Spokane Street Terminal. Funds for the expansion were voted in a bond issue approved by the voters in the last election.

It was originally anticipated that an all-new, four-story cold storage building would be constructed, but the Port of Seattle engineering department now has under study a plan which may be more feasible. It calls for the modernization of existing facilities, plus providing 20,000 square feet of cold storage floor area through the construction of a 100′ x 100′, two-story warehouse adjacent to the present cold storage buildings.

Earley also said that an expenditure of $100,000 is planned for the improvement of the Port's Bell Street Terminal as a cold storage facility. The present plan is to convert 6,000 square feet of dry storage area in the Bell Street Terminal's second floor and 16,000 square feet of dry storage area in its third floor into cold storage, with the addition, also, of sharp freeze rooms and equipment on Bell's ground floor.

Puget Fisherman Keeps Card File for Catch

Using a card file to keep a record of where fish are caught is a new wrinkle that has been successfully used by Vance Coder of Lopez Island, Wash., who owns the 40′ *Hyiu Scout* powered with a Chrysler engine.

Fishing primarily for dogfish, Coder keeps a running card file of the location of all catches of any consequence, the amount and potency of the livers and any other pertinent information which he feels will be helpful in refishing the area.

By keeping his charts marked with the location of his grounds lines he can return to fish over the locations which produce the best livers and the most fish. Coder says that by keeping his cards up to date his catches have been above average over the two years he has been keeping this type of record.

First Fresh Herring Reaches Juneau

The first load of fresh herring to reach Juneau was delivered to the Juneau Cold Storage Company.

The 300-barrel load was brought from Sitka aboard the vessel *Sentinel*, Vincent Anderson skipper. Anderson got the herring from Tom Ellswick of Sitka, who supplies both the Juneau and Pelican, Alaska, cold storage firms.

About 4000 barrels of fresh herring are expected at the Juneau Cold Storage Company this season. It will be frozen for bait, according to Wallis George, manager.

The first load arrived about two weeks later than usual because of poor weather.

Powered by a 6-cylinder GM Series 71 Diesel, "Mary M" was designed by Tams, Inc., and built by Diesel Engine Sales Co., St. Augustine, Fla.

"NEVER SAW PERFORMANCE LIKE THIS BEFORE!"

OWNER J. RAY ALLEN, who operated one of the first Diesels built by Winton in 1918, reports the successful maiden voyage of his General Motors Diesel-powered "Mary M." The 84-day trip took this sturdy 60-footer from Miami through the Panama Canal to Cape Velas, Costa Rica, where she fished along the coast, and to her home port, San Diego.

"The General Motors engine operated very satisfactorily at all times," writes Captain Allen. "In 30 years' Diesel experience, the engine on the 'Mary M' is the only one I have seen that performed 6000 to 7000 miles requiring no attention other than changing oil and filters. On arrival at San Diego, no service was needed beyond checking valve clearance and injector timing.

"Fuel consumption for all purposes was 8 gallons per hour cruising at 10 knots. Lube oil consumption was very low as we did not add any oil between changes at 200 hours. The engine maneuverability was very satisfactory—it could not have performed any better."

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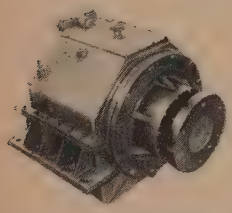

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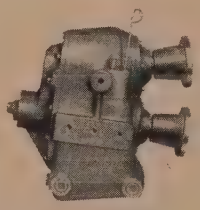
This new type of reduction gear, with medium and high speed Diesel drive, greatly increases cargo capacity. It is specified equipment on many of the large new workboats. Standard units available in capacities up to 2000 hp., larger sizes on special order. Send for details.



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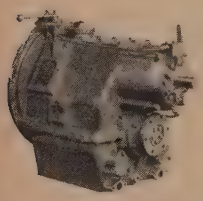

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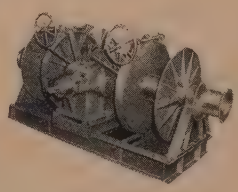

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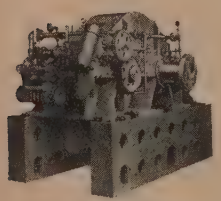

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GEAR PRODUCTS

Pacific Operators Plan Gulf Menhaden Plant

Temporary abandonment of plans to establish a tuna cannery on the Gulf Coast, using West Coast clippers to supply raw material, was announced March 7, by Cecil W. Drake, San Diego, who had been one of the principal backers of a deal to pack tuna in Mississippi.

Instead, the group will invest in a $200,000 menhaden reduction plant at Moss Point, Miss., five miles from Pascagoula.

Reason for change of plans was given as the sudden improvement in the tuna business of Southern California, and the fact that all vessels will be needed to meet the local demand. "The tuna industry looks much better now, with inventories down and vessels operating with no restrictions," said Mr. Drake.

"One of the reasons for wanting to establish a cannery on the Gulf was to relieve a critical situation regarding full-time activity of our clipper fleet, that existed late last year, and to provide another outlet for the vessels to serve," he said.

Suggesting the company may, some time in the future go through with its original plans, the name, Tuna, Inc., is being retained. Officers of the corporation are: Mr. Drake, president; Joseph Charlton, vice president and manager; J. M. Martinac, secretary-treasurer; and Arne Strom, board chairman.

B. C. Plant Workers Ask Increased Scale

British Columbia cannery, reduction plant and net workers have asked for a general wage increase of 10c an hour in their negotiations with fishing companies. The proposed agreements list union shop as a major demand for this year.

The wage demand for all classifications except women cannery workers and certain hourly paid male cannery workers was made in the form of a proposed $19.20 increase in the monthly wages.

Fresh fish and cold storage workers have asked for an increase of 15c an hour for all classifications of labor, and they also suggest adoption of the 40-hour week.

License Fee Raised

The Mexican government has raised the licenses under which the American tuna clipper fleet obtains permits to seine live bait in its territorial waters off the west coast by 27% to compensate for the recent devaluation of the peso.

Enforcement "Teeth" for Sardine Rules Proposed

Proposed regulations for 1950-51 reduction of sardines was the main topic of discussion at the meeting of the California Fish & Game Commission in Monterey last month.

Richard S. Croker, chief, Bureau of Marine Fisheries, read the proposed regulations, most of them similar to those in force last season, including the industry-wide bag limit on sardines for reduction purposes.

One of the principal discussions came on the new proposed regulations regarding suspension of permits without notice for violation of rules and regulations.

Ralph Marron, former deputy attorney general for the commission, now a Monterey attorney, argued that permit holders should be notified that a complaint was to be filed against them.

Ralph Scott, present deputy attorney general for the commission argued that the commission should not limit its authority in any way, and that granting of permits was a privilege given to reduction plants operators, not a right.

Roy Beaton, California Fish Canners Association, opposed the provision permitting suspension of permits without notification; as did W. Wade Ambrose, Westgate-Sun Harbor; E. T. Meakin, Tamalpais Fishing & Packing Co.; and John Morris, French Sardine Co.

The commission finally decided that the plant owner or operator in violation of the rules would be notified that immediate suspension of his permit was contemplated by the commission; but irrespective of such notice the commission could suspend the permit immediately.

President Hastain of the commission announced that the next regular meeting of the commission would be held April 14 in San Francisco, and at that time the sardine tonnage allocation would be made, and sardine reduction permit applications acted upon.

Among the new regulations adopted by the commission was one stating that the total tonnage to be used for reduction of whole sardines shall be announced by the commission on or before May 31 of each calendar year. The tonnage shall be divided equally among all permitees. At the discretion of the commission, the total tonnage so announced may be increased or decreased during the course of the season.

All applications for reduction permits must be received by the Fish & Game Commission on or before the close of the business day of the first Monday in April in each year, for each subsequent sardine season.

If a permit is granted for the ensuing season, it shall be issued only to a complete reduction plant, provided however, that where a reduction plant has been destroyed by fire or act of God, the permit may be issued during the reconstruction of such plant.

All scales or devices for weighing sardines shall be marked, calibrated and maintained at all times in such a manner that the correct weights of fish may be conveniently read or ascertained to the satisfaction of any employee of the commission.

New Winter Closure For Alaska Trolling

In accordance with recommendations of the Pacific Marine Fisheries Commission, the new Alaska regulations close all *outside* waters of Alaska to trolling for King salmon from Nov. 1 to March 15, and for Silvers from Oct. 31 to June 15.

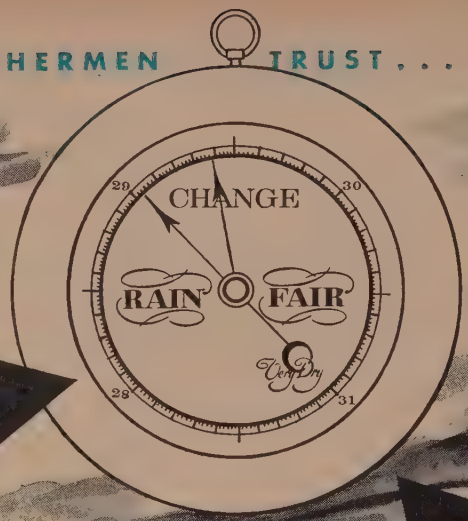
The fall trolling closure has been shortened to the period Sept. 20 to Oct. 5, but now covers *all waters.* Taking of undersized Kings by *any form of gear,* or *possession* of such fish, is prohibited. Trolling west of Craig Point in the Stikine district is exempted from the local closures applied to gillnets.

Mackerel Fishing Good

From a 6,572-ton purse seine catch of mackerel in February, 11 canneries in the Los Angeles-Long Beach harbor district processed 113,886 cases, largely Pacific type.

Fishermen found February profitable, compared to the same period last year, when only 1,224 tons of mackerel were landed. Some 35 or more vessels, including the lampara fleet of San Pedro, were working the mackerel grounds of the Channel Islands. Largest tonnage days were February 23, when 1,158 tons were landed, and February 25 when 1,508 tons were produced. In January only 484 tons of mackerel were processed.

THINGS FISHERMEN TRUST . . .



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GOLD MEDAL
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Canadian Representative. Western Leckie Limited, Vancouver, B. C.

GOLD MEDAL SEINE TWINE — For hand-knitting, hanging and mending get the same high-quality twine that Gold Medal Netting is knit from. Ask for and be sure you get Gold Medal.

Other Netting Products: AN&T Coy Linen Gill Netting—Gold Medal Sea Island Cotton Gill Netting—Barbour's Nylon Netting—Plymouth Rope—A complete Line of Netting Accessories.

Pacific People to Play Leading Parts At N. F. I. Convention April 17 to 20

Pacific Coast regions of the National Fisheries Institute will stand in a dominant position at the fifth annual convention of the Institute, to be held in Chicago April 17 through 20.

With the national president—*Harald Synnestvedt*—and the national secretary—*Wade Ambrose*—both from the Pacific Coast, the West has particular interest in the meeting. Moreover, a large number of the key men on the Institute committees come from Region IV, the Pacific Southwest, and Region V, the Pacific Northwest.

Mr. Synnestvedt with the convention will conclude a highly successful year as administrative chief of the national organization. Under new by-laws effective this year, he will continue as chairman of the board of directors until the 1951 convention. Whoever is elected president at Chicago will assume the administrative duties immediately following the meeting.

Although meetings of directors and some committees will be held earlier, and that of the Oil and Meat Section Apr. 17, general sessions of the convention will begin Apr. 18 and will conclude with the annual banquet Apr. 20.

Pacific Coast men are chairmen of two of the Institute's standing committees.

E. A. Ruthford of the San Juan Fishing & Packing Co. is chairman of the traffic committee, whose membership also includes *J. W. Mendenhall* of the Ketchikan Cold Storage Co. and *Sam Lowrie* of Freeman Certi-Fresh Foods, Los Angeles.

Harry Beard of the New England Fish Co. is chairman of the Technological Section, with *Robert E. Silver* of Whiz Fish Products, *T. D. Sanford* of F. E. Booth Co., and *G. H. Clark* of Terminal Island Seafoods as other members.

W. C. Eardley, Jr. of Eardley Fish & Fillet Co. is vice chairman of the Toastmasters, with *Elwyn C. Hale* of Elwyn C. Hale Fisheries as a committee member.

The Fish Oil and Meal Committee includes Pacific Coast men as follows: *Roger W. Harrison* of Lyle Branchflower Co.; *E. W. Lockwood* of Wilbur-Ellis Co.; *H. J. Almquist* of The Grange Co., Modesto; *E. T. Meakin* of Polarine Fisheries; *Edward David* of Del Mar Canning Co.; and *A. H. Mendonca* of F. E. Booth Co.

A great deal of interest attaches to the import-export committee, on which the Pacific Coast is represented by *James Lane* of Westgate-Sun Harbor Co.; *Dudley Turnacliff* of Yaquina Bay Fish Co.; *J. D. Williamson* of Fortune Fisheries; and *Maurice Rattray* of Anderson & Miskin.

Charles Alhadeff of Whiz Fish Products and *W. Wade Ambrose* of Westgate-Sun Harbor Co. are members of the important finance committee.

Pacific membership on the Ethics committee includes *William S. Jensen* of Washington Fish & Oyster Co. and *Theo Weissich* of Theo Weissich Fish Co., Eureka.

E. N. Steel of the Rock Point Oyster Co. is Pacific member on the by-laws committee.

Harold Cary of the American Tunaboat Association and *Egill Peterson* of Eardley Fish & Fillet Co. are Pacific members on the important resolutions committee.

Quality committee membership includes *Arthur Freeman* of Freeman Certi-Fresh Foods; and *L. K. Small* of Marine Products Co., San Diego.

Brad Hall of Booth Fisheries Corporation, Seattle, and *Phelps Hollywood* of Carmel Canning Co. are Pacific members on the statistics committee.

Pacific members of the legislative committee are *J. H. Cellars* of the Columbia River Packers Association; *H. C. Davis* of Terminal Island Seafoods; and *H. E. Lokken* of the Fishing Vessel Owners Association.

Lionel Shatz of A. Paladini, Inc., is Region IV vice president, while *W. Arnold Waring* of Haines Oyster Co. is vice president of Region V.

Directors from Region IV include *Harold Cary, Max Freeman* of Freeman Certi-Fresh Foods; *Neil Taylor* of Norfish Sales Co.; *J. D. Williamson; Jack Willis* of Wilbur-Ellis Co.; *Theo Weissich; E. T. Meakin* and *H. C. Davis.*

Pacific Northwest region members of the board of directors, beside the officers, are: *Charles Alhadeff; Gordon Bruce* of Portland Fish Co.; *Henry Goodrich* of New England Fish Co. of Oregon; *T. F. Sandoz* of Columbia River Packers Association; *Meyer Bornstein* of Bornstein Seafoods, Bellingham; *W. C. Eardley* of Eardley Fish & Fillet Co.; *E. A. Ruthford;* and *Harald Synnestvedt Jr.* of New England Fish Co., Everett.

Fish Divoteers Spring Tourney Set for April 21

Seattle's Fish Divoteers, composed of golfing fish men and allied industry representatives, will hold their annual spring golf tournament at the Rainier Golf Club, Seattle, April 21.

Major plans for the event were made at a meeting of all committee members at the Washington Athletic Club March 16.

Walter Hanson of James Farrell & Co. is president of the organization this year and Gordon Davis of Oxenberg Bros. is secretary. The tournament committee is composed of Jack Pierce, chairman; Arne Antonsen, Al Cook, Eldon Erickson, Phil Hanson, Howard Miller, Charles Sherriff, Jim Stevens, Ed Stevenson and Ray Wallitner.

Marhild, small tuna clipper, sold at U. S. Marshall's sale at Terminal Island, has been purchased by Nordby Supply Company, Seattle. She was overhauled at Harbor Boat Building Company preparatory to return to the Pacific northwest.

Fisherman Wins Damages

Tomaso San Paolo, Monterey fisherman, won damage of $5,747.25 in federal court last month. He brought suit against a Monterey fishing partnership, claiming he was injured aboard the purse seiner *Sherman Rose,* Feb. 26, 1948. He said his knee was crushed in a turntable on the vessel and the injuries kept him from working at his trade. The fisherman had asked in his suit damages of $50,476.62 from Antonio Nuovo and the late Angelo Lucido.

Speed... .to bring 'em home alive

POWER by Fairbanks-Morse!

The "A. C. McLoon" is one of hundreds of vessels depending on Fairbanks-Morse for faster runs with full holds. Her Model 31 Diesel, with 2-to-1 reduction gear, puts out 175 hp. to cut two hours from her trips to and from the lobster pounds. If you're interested in speedy runs and dependable power, call our branch office or write Fairbanks, Morse & Co., Chicago 5, Illinois.

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A name worth remembering

DIESEL LOCOMOTIVES • DIESEL ENGINES • PUMPS • SCALES • MOTORS • GENERATORS
STOKERS • RAILROAD MOTOR CARS and STANDPIPES • FARM EQUIPMENT • MAGNETOS

Tuna Research Treaties Both Go Into Effect

Ratifications of the treaties with Mexico and Costa Rica providing for international research into the biology of the Pacific tunas and the bait fish used in the tuna fishery were exchanged in Washington in March. This puts the treaties into effect.

The treaty with Mexico concerns only that country and the United States; but that with Costa Rica can be adhered-to by other countries, with the consent of the two original signatories.

It is anticipated that prompt action will be taken in the matter of appointing American members of the committee, which is done by the President.

Firm Market Anticipated For Early Troll Fish

Opening of the salmon trolling season in Oregon and Washington March 15 saw the market hungry for any kind of fresh salmon—hungry, and willing to pay well. Closure of the spring fishing in Oregon and Washington waters for the second successive year saw the Sacramento River fishery commanding principal interest, although yield was not heavy.

Firm figures were expected in the bidding at least through the remaining days of Lent.

The Chinook troll season, set by Pacific states in response to the program adopted by the Pacific Marine Fisheries Commission, runs from March 15 to Oct. 31; and that for Silver salmon will open June 15, also closing with October.

It is to be noted that, effective this year—and probably thereafter—the Alaska fishery regulations also establish March 15 as the date for the opening of trolling in the outside waters of Southeast Alaska. The new regulation was not actually effective this year, inasmuch as it was not published until approximately the date set for the opening.

Texas Mothership Lands Peruvian Tuna Load

A bumper crop of raw tuna arrived at San Diego Packing Company March 7. It was around 900 tons, delivered by the Houston, Texas, mothership *Oceanic 5*. The fish was caught in Peruvian waters by native fishermen and a fleet of small vessels were used as feeders to the big refrigerated mothership. The ship had been in South American waters for about five months.

Leading personalities in the Salmon Research Conference: left to right, Dr. E. D. Clark, secretary of the Association of Pacific Fisheries and director of the Northwest Branch, National Canners Association; Aubin R. Barthold, chairman of the Conference and of the Advisory Committee of the Fisheries Research Institute; Dr. Wm. F. Thompson, director of the Fisheries Research Institute; Dean Edwin R. Guthrie of the University of Washington, in general charge of the Research Institute.

IMPARTIAL, SCIENTIFIC STUDY ASSURED THROUGH UNIVERSITY

"The impartiality and thoroughness of our work is vital to its usefulness to you," declared Dean Edwin R Guthrie of the Graduate School, University of Washington, addressing the March 10 Research Conference of salmon packers on the relation between the University and the industry.

"As we see it, the industry needs a knowledge of the supply of fish upon which it depends. It wishes to make this supply permanent, and to understand how and why it varies." Such knowledge, he added, "is also something that you need when the government regulates your activities in the public interest. If you enter its hearings without the necessary knowledge . . . you must depend upon that government to take care of your prosperity for you. . . . . We assume that your interest in this program of research is to know how to meet the problems of raw supply, and also to know that there are rational and reasonable bases for the regulations, and that the basis used in regulation is made a matter of public knowledge.

"The University can give you access to the facts available through scientific inquiry, and it can train experts. But the value of its services depends upon its own integrity and that of the men it trains. *The facts, completely and impartially gathered, can give you a solid basis for conduct of your affairs,* but it can do so only if they are thus gathered. . . . Only if we create conditions under which research can be done according to such high standards will you get a proper return for your money. . . . These standards are what give us our reason for being."

This research, he added, is regarded as a public service, which the University can give "only when the research is on a high plane, advancing not only your interest but those of the public and of scientific knowledge."

Then, Dr. Guthrie added, "there arises the question of what you can do with the conclusions we reach . . . The best use of the results of this research will take time and your close attention . . . You need science in your business, but it is you who must use it as long as you control your own businesses.

"We ask of you understanding of our standards of work, patience with us while we build our project soundly, and that your own organization make your own use of what we give you."

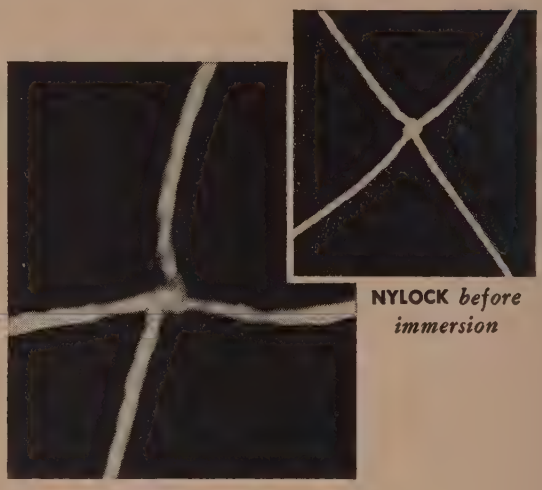
Seiner "Onward" Burns

Fifth Southern California purse seiner to meet disaster since last November, the 55′ *Onward,* Capt. Tom Nishida, was destroyed by fire while operating off Avalon, Catalina Island, February 22. The skipper and crew of seven were saved.

Look at the Evidence...

Cotton before immersion

Cotton after 72 hours in water



NYLOCK *before immersion*

NYLOCK *after 72 hours in water*

. . . then make sure that your netting is made of NYLOCK® 100% Nylon Fish Netting

• What more graphic proof is necessary than the photographs above which show cotton and NYLOCK netting before immersion – and after 72 hours in the water. Notice the fineness of the NYLOCK netting as compared with cotton. Notice how NYLOCK has stood up in the water, proving that it wears longer – gives you more for your money!

Here are some other facts about NYLOCK that you should know: NYLOCK Netting requires no drying, no preservatives. It retains an amazingly high degree of tensile strength when wet. It is not affected by mildew, marine organisms, oil or gasoline. NYLOCK Netting is especially treated for sunlight resistance. It absorbs only 6% of its weight in water compared with cotton's and linen's 100% absorption. Tests have proved that NYLOCK Nylon Netting *increases the catch – lowers operating costs.*

For further information . . . write, wire or phone one of the following manufacturers who use NYLOCK Nylon exclusively for all their Nylon Fish Netting:

R. J. EDERER and subsidiaries—540 Orleans St., Chicago, Ill. Unity and Elizabeth Sts., Philadelphia, Pa.

THE FISH NET & TWINE CO. – 310-312 Bergen Avenue, Jersey City, N. J.

MOODUS NET & TWINE INC. – Moodus, Connecticut

A. M. STARR NET CO. – East Hampton, Connecticut

JOSEPH F. SHEA, INC., Successor John S. Brooks, East Haddam, Connecticut

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NYLOCK*

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—also manufacturers of Nylon Maitre Cord and Hanging Twine

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Point Barrow Eskimos Reject Krug Reservation

Flat rejection of the proposed Point Barrow reservation authorized by Julius Krug on his last day as Secretary of the Interior was voted by the Barrow Indians themselves. The vote was 231 against the reservation and 29 in favor of it.

Vote of the Hydaburg Indians on a similar reservation was scheduled for February, but was subsequently postponed until April.

Former Secretary Krug signed an order authorizing the reservations just as he left office, after repeatedly indicating he would not do so. Acceptance of the proposal by the Natives is required.

U. K. Cooperatives Drop Salmon Cannery Plan

Britain's dollar shortage has temporarily halted the plans of co-operative societies in the United Kingdom to join with the Fishermen's Co-operative Federation in British Columbia in the establishment of a salmon cannery near Steveston at the mouth of the Fraser River.

The original idea was to organize a concern to be known as Pacific Fisheries Co-operative, with a capital of $2,000,000. It would be jointly owned and controlled by the Co-operative Wholesale Society of London and the Scottish Co-operative Wholesale Society of Glasgow.

The overseas societies, although holding large financial reserves, were denied their first application to export capital even though it was represented that the cannery would eventually return the whole investment with a profit.

At present the Fishermen's Federation in British Columbia concerns itself mostly with fresh and frozen fish.

Sen. Reid Names Dangers To Canada's Fisheries

Speaking in the Canadian Senate at Ottawa recently, Senator Thomas Reid of New Westminster, chairman of the International Pacific Salmon Fisheries Commission, declared that British Columbia's fisheries were faced by two "dangers" — possible exploitation of the offshore salmon fishery by Japanese and an attempt by aluminum interests to "grab off" hydro-electric power along the Fraser River to the detriment of salmon spawning grounds.

Senator Reid urged that before Canada signs a peace treaty with Japan the government should appoint an advisor to safeguard Canada's fishing interests.

INDEPENDENCE OF INSTITUTE'S FISHERY RESEARCH EMPHASIZED

Discussing the Alaska research program from the Industry's standpoint, W. C. Arnold, managing director of the Alaska Salmon Industry, Inc., emphasized to the March 10 Research Conference the fact that it is a completely *independent* research by the University of Washington, being financed but not controlled by the packers of the respective areas.

It is not a small project, he pointed out—since the start in 1945 the packers have contributed almost exactly $1,000,000 to the work; and it is expected to be continuous, at least until the essential problems have been solved.

This money has been well spent, he declared, and the work will prove of incalculable benefit not only to the salmon packers but to allied industries, the state of Washington and the territory of Alaska.

Reviewing the history of the movement, he referred to the industry's interest in conservation, starting in the late 1890's; passage of the White Act in 1924, and later efforts to develop an adequate background of scientific knowledge through government agencies.

Funds and personnel provided by Congress, however, were not adequate to the task; and in 1945 a group of Bristol Bay packers initiated an independent program supported by voluntary assessment. Later, by arrangement with the University of Washington, Dr. Thompson undertook to carry on the work.

The Research Institute

In 1947, after conferences between Dr. Raymond B. Allen, president of the University; Dr. Edwin R. Guthrie, dean of the graduate school, and representatives of the fisheries, the University established its Fisheries Research Institute, placing Dr. Thompson in charge and assigning to it such research projects as might be requested and financed by any branch of the industry—the first such project being the Bristol Bay investigation.

The Bristol Bay group then signed a contract with the University, and about the same time a similar contract was made with the Southeast Alaska Packers; similar action being taken by the Kodiak Area group in 1948.

Under these contracts, Mr. Arnold stated, money to cover the cost of each project is deposited annually in a specific fund of the University, which is billed each month for current costs: packer's assessments being based on annual budgets submitted by Dr. Thompson and adopted by the respective area committees.

Not an Industry Enterprise

The program is thus not a private or Industry enterprise. The work is carried on and fully controlled by the University of Washington, being conducted according to the highest academic and scientific standards; all data and results are the property of the University, and will be embodied from time to time in its publications.

Working contact with the industry is maintained through an advisory committee, appointed by Dr. Allen, which now consists of Aubin R. Barthold of the Alaska Packers Association, chairman E. M. Brennan of P. E. Harris & Co., president of the Association of Pacific Fisheries; H. B. Friele of the Nakat Packing Corp.; A. W. Brindle, Wards Cove Packing Co. and Red Salmon Co.; Guy V. Graham, Libby, McNeill & Libby; Lawrence Calvert, San Juan Fishing & Packing Co.; John A Green, Pacific American Fisheries, Inc.; Mr. Arnold, and Dr. E. D. Clark, secretary of the Association of Pacific Fisheries and director of the Northwest Branch, National Canners Association.

Mr. Arnold expressed himself as enthusiastic for the program, which he hoped will soon be expanded to cover all salmon areas. "We are fortunate" he declared, "that the work is in the hands of the University of Washington—probably the world's leading fisheries educational institution—and of such a man as Dr. Thompson.

"This is not a temporary problem. The research must be on a continuing basis. By such means, and by such means only, can the resource and the industry be perpetuated."

Honolulu Broker Visits

Donald C. Parker, Donald C. Parker Co., Honolulu, T.H., canned food brokers, and Mrs. Parker, were visitors to the mainland last month. While in San Francisco they visited A. L. Desmond, general sales manager, F. E. Booth Co., Inc.

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YOU GET WHAT YOU WANT when you rig with Roebling Wire Rope... performance you can depend on... service that lasts longer and cuts down your costs!

Steel used in Roebling Wire Rope for Rigging and Trawler Lines is made in Roebling's own steel mill for utmost strength, toughness and long life under all conditions of sea and weather. Every step in drawing the wire and stranding is performed with painstaking care and by the most modern, precision machines. Roebling is the most famous name today wherever wire rope is at work, ashore and afloat.

There's a type and size of Roebling Wire Rope to meet your every requirement. Call on your Roebling Field Man to help you choose the right ropes for best service at least cost. John A. Roebling's Sons Co. of California—San Francisco—Los Angeles—Seattle—Portland.

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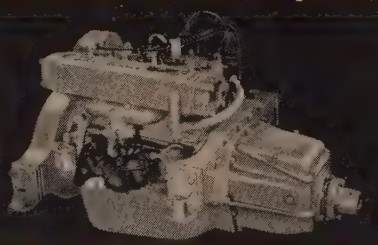
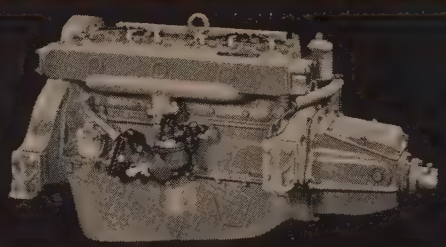
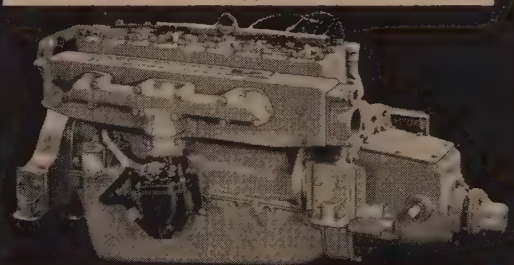


Model B—Compact, power-packed Chris-Craft 60 h.p., 132 cu. in. Reduction drive available. A great value!



Model K—For more power and economy... 95 h.p., 229 cu. in. Reduction drive, opposite rotation available.



Model M—Rugged, dependable... 130 h.p., 320 cu. in. Available with reduction drive and opposite rotation.

PROOF! PROOF!

Harold T. Simpson

"Our reporting service boat, which contacts all freighters passing Port Huron, is powered by a 5-year-old Chris-Craft Marine Engine," writes Harold T. Simpson, Port Huron, Mich. "After a general overhaul, the engine was put into service on March 30, 1949. It remained in service 24 hours a day with 3 operators until September 22nd, contacted 14,548 freighters. The engine was never touched except to change oil. This splendid performance record convinced us that money can't buy a better marine engine than a Chris-Craft."

FISHERMEN! Buy the best for less—buy Chris-Craft Marine Engines. A complete line. Reduction drives... opposite rotation... also high speed engines for light, fast hulls. Ask your Marine Dealer, Boat Yard or Boat Builder for prices and data. These world-famous engines will do a better job for you.

Chris-Craft

MARINE ENGINE DIV., ALGONAC, MICH., U.S.A.

Early Crab Pack Sketchy

Crab fishing along the Pacific Coast generally was on the light side during the first quarter-year, but from Yaquina Bay south to San Francisco production was reported pretty good.

Weather was undoubtedly to blame for some of the curtailment, but crabs were also reported scarce at various points.

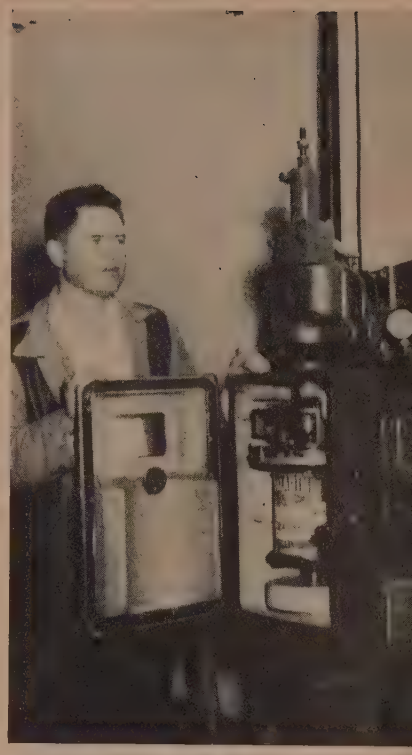
Whiz Fish Products shut down its LaConner operation the middle of March on account of light fishing.

On the Columbia River deliveries were very light.

At Newport, Ore., the Yaquina Bay Fish Co. was busy canning before the end of February, and Dud Turnacliff reported the crabs as abundant, and averaging as heavy, as usual. That meant they were bigger crabs, and more plentiful than in the spring of 1949—but not as big and numerous as in the early months of 1948, which was the all-time-high year in North Pacific crab canning.

Buyers at Yaquina Bay and thereabouts were paying 10c per lb., ocean run. They said that price was a bit too high for fair return prior to March, but they hoped that the meat recovery would pick-up a bit and make a price reduction unnecessary.

Richard DeCou, who is resident manager for Pacific Pearl of Alaska, Inc., at its new crab cannery in Ketchikan, was in Seattle for a time about the middle of March in connection with shipping a supply of pots north. He reported that the new cannery was not yet in operation, but that it was ready to go and would be packing crabs within a short time. He is confident that that operation will be able to develop an excellent supply of crabs, and that it can provide Ketchikan with a payroll which will run virtually the year-round.



Charles Timmons, in charge of the A. Paladini, Inc., plant at Fields Landing, near Eureka, showing how the new 5-lb., lithographed frozen crabmeat can is sealed under vacuum in an American Can Co. semi-automatic vacuum closing machine prior to freezing.

Westward Herring Quotas On New Basis

The new regulations fix the Kodiak herring quota at 275,000 bbls. a year, and the combined Prince William Sound-Resurrection Bay quota at 180,000 bbls., for the three years 1950, 1951 and 1952; but the quota season has been shortened, to end Sept. 30 in Kodiak and Aug. 10 in Prince William-Resurrection Bay waters.

It is stated that "Instead of frequent quota adjustments, based on predictions of availability . . . these areas will operate under annual quotas which are stabilized for a 3-year period and are largely based on previous average productivity . . . Herring may be caught subsequent to these dates without regard to quota limit, because the fall runs are believed distinct and not sufficiently in need of such protection."

Southeast Alaska quota is cut for 1950 to 150,000 bbls., based on "a currently prevailing natural scarcity"; the quotas continuing subject to annual adjustment based on the years immediately preceding.

Pounds are no longer prohibited in the vicinity of herring spawning grounds except at Fish Egg Island near Craig; but the closed area on the west side of Admiralty Island is extended to include all waters from Pt. Gardner to Pt. Retreat.

New Report on Halibut

A new report by Dr. William F. Thompson, first scientific director of the International Fisheries Commission, on "The Effect of Fishing on Stocks of Halibut in the Pacific," is being published by the University of Washington, under joint sponsorship of the Fishing Vessel Owners Association and the Deep Sea Fishermen's Union. Dr. Thompson has dedicated his report to Miller Freeman, publisher of PACIFIC FISHERMAN and one of the original members of the Commission.

In it, Dr. Thompson sets forth the theory on which the first successful regulatory program for the halibut fishery was based in 1931, and a careful appraisal of the effects of the conduct of the commercial fishery in subsequent years.

Elmer Ely Dies

The many friends of Elmer J. Ely, 70, well known figure in the California fresh fish industry were shocked to learn of his death last month in San Francisco.

Mr. Ely had been associated with the General Fish Co., San Francisco, and its predecessor companies for the past 45 years as accountant and office manager.

He leaves a wife. His son, Capt. Bernard Ely, a ski-trooper, was killed in action in World War II.

Vacuum-Packing Frozen Crabmeat in 5-lb. Tins

Humboldt crabmeat is being vacuum-packed in 5-lb. lithographed cans at the branch of A. Paladini, Inc., at Fields Landing, Calif. After sealing under high vacuum in an American Can Co. semi-automatic machine, the cans are frozen.

Charles Timmons, manager of the branch plant, expects to pack about 3,000 lbs. of crabmeat per day at the peak of the season.

By removing air from the tin, the vacuum process is expected to reduce oxidation of the crabmeat in frozen storage and thus prevent toughening. Initial tests indicate that vacuum packing can extend the storage life of picked crabmeat to perhaps as much as six months.

Alaska Statehood Bill Passed by House

A bill to give statehood to Alaska was passed by the House of Representatives March 3 by a vote of 186 to 146, and went to the Senate. Considerable doubt was expressed in many quarters, however, whether the Senate would approve the measure at this time.

Quality Always

FOR many years, the canned salmon industry has utilized its resources to give consumers a better product, constantly improving production and distribution methods.

Today, the industry offers with pride a consistently fine basic food that is rich in nutritional value, appetite appeal and adaptability to modern mealtime needs.

A one-pound can of salmon contains enough health-building goodness to feed a family of four a delicious, satisfying meal. High in protein content, it boasts many other essential food requirements also. *Canned salmon is actually an economy food!*

All the facilities of Pacific American Fisheries are pledged to continued development of the industry.

PACIFIC AMERICAN FISHERIES, Inc.

South Bellingham, Washington

"Quality Always"

SALES SUBSIDIARY: DEMING & GOULD COMPANY, SOUTH BELLINGHAM

L. B. Ederer, President Of Net Firm, Dies

His many friends in the fishing industries will mourn the passing on of Louis B. Ederer, president of the R. J. Ederer Company. The company in which Louis Ederer rose to be head, traces well back into the 1800's when his brother, Rudolph, and sister, Henrietta, organized the present firm and continued in a family tradition of weaving nets.

From the very first, the life of Louis Ederer has been replete with interesting circumstances, for when he was an infant only six months old, their father's original fringe and braid factory was destroyed in the historic Chicago Fire of 1871—and his own life saved by being carried away from the raging flames in the arms of his sister Henrietta.

As a bright young man he left the campus of St. Benedicts College in Atchison, Kansas, after his graduation and entered business during the period when all the wonders of science and technology were just the dreams and plans of early day visionaries. Louis Ederer, too, was a pioneer who did much to build up a great industry and a great city. He not only saw all the miraculous developments of the scientific era, but also lived through the tragedy of two World Wars, when he helped to provide vitally necessary camouflage material.

From the early days of the small company, Louis Ederer kept pace with the trends which saw the Ederer Company become one of the leaders in the manufacturing of both fish nets and sporting goods netting.

In 1920, at the death of his brother Rudolph, Louis Ederer took over the management. He was a man who believed in himself, his company, and always strived to do everything to make working conditions better.

Though 79 years of age, he was unusually alert and active in administrative policies of the R. J. Ederer Company up to 1948 when he took a leave of absence due to illness. Mr. Ederer leaves a daughter, Miss Annette, and two sons, Clarence and Eugene, both officers in the R. J. Ederer Company.

JOE BALESTRIERI, head of Joe Balestrieri & Co., San Francisco fish factors, was passing out the cigars the other day, the occasion his being a grandfather for the second time. His daughter, *MRS. PHILLIP B. SANFILIPPO*, the former Miss Josephine Balestrieri presented her husband with a 7-lb., 2-oz. daughter. The newcomer has been christened Sandra Marie.

FAWS Centers Research On S. E. Alaska Salmon

Regrouping of the federal forces of fishery research in Alaska, and concentration of investigations in the Southeast Alaska district, was announced in March by A. M. Day, director of the Fish and Wildlife Service.

Although most of the Service's funds and personnel available for research will be directed to the problems of the salmon resource of Southeast Alaska, other projects will not be entirely abandoned, Bristol Bay, Karluk and herring studies will be put on a "routine" basis.

George Kelez will be chief biologist in charge of the Alaska program, and responsible direct to Dr. Lionel Walford, chief of the biological section, in Washington. Mr. Kelez is relieved of the fisheries management functions for which he was formerly responsible, in order that he may devote his attention entirely to the biological problem.

The Southeast Alaska research will be divided into four Phases, with principal personnel and financial budgets as follows:

1. *Spawning and Fresh Water Survival*—In charge of M. G. Hanavan, assisted by Willard O. Brewinton and Jerrold Olson; budget, $30,000.

2. *Ocean Survival and Homing*—In charge of George J. Eicher; budget, $19,000.

3. *Identity of Races*—In charge of Richard F. Shuman, assisted by Carl Elling and others; budget, $34,000.

4. *Fishing Intensity and Gear*—In charge of Lawrence Kolloen, assisted by Miss Elizabeth Vaughan and Mr. Zene McNamee; budget, $17,000.

The late Louis B. Ederer, president of the R. J. Ederer Co., fish netting manufacturers, who died late in February.

"Two Sisters" Repowered

Making an early preparation for the coming Albacore season the *Two Sisters,* a Kettenburg-38, has had her original power replaced by a Model 3071-A, 3-cyl. General Motors diesel, with 3 : 1 GM hydraulic reduction gears. The new propulsion was supplied and installed by Crofton Diesel Engine Company, Southern California GM distributors, from its San Pedro branch. *Two Sisters* is owned by Augustin Stagnaro.

Continued Concentration Plan for Naknek-Nakeen

Nakat Packing Corporation's operating program for this season, says H. B. Friele, vice-president and general manager, is practically the same as in 1949, except for concentration of Bristol Bay packing with the Red Salmon Co. in the latter's Naknek cannery. With another light run expected on Bristol Bay in 1951, present plans contemplate a continued concentration there; the 1951 pack of both Nakat and Red Salmon Co. to be made in Nakat's Nakeen cannery.

With the unexpected Pink run, Nakat's three Southeast Alaska canneries—Waterfall, Ketchikan and Hidden Inlet—produced the largest Pink pack of any one *company* in Alaska—378,016 cases (none on Bristol Bay); and this company's total pack of all species, 467,013 cases, was second only to that of Pacific American Fisheries, whose total was 478,771 cases.

New Hydaburg Seiner

Delbert Nix, one of the leading fishermen of Hydaburg, Alaska, will be fishing a brand-new vessel this season, *Janet N,* launched in February by the Hanson yard, Seattle.

The Alaska-limiter was sponsored by Mrs. Herbert Kittlesby, wife of the manager of the Hydaburg Cooperative Association.

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HAWAIIAN TUNA

Fisheries Technologists Urge

More Fundamental Research By Governmental Agencies

Greatest usefulness of governmental agencies devoted to fisheries technology lies in the field of *fundamental research,* rather than in the study of specific, immediate problems of operation or development, which can be more suitably and properly handled by private enterprise within the fisheries and related industries.

This was the unanimous consensus of the Pacific Fisheries Technologists attending the first annual meeting of their new organization, held at the University of Washington Feb. 24-25, at which more than eighty were present, representing a remarkably broad field.

Aside from public and semi-public research and educational institutions, private and industry-operated laboratories and fish-processing concerns, the attendance came from such diverse sources as the U. S. Army, chemical and pharmaceutical houses, and equipment manufacturers; and from the fishery areas of Washington, Oregon and British Columbia, with some from California. Their discussions were of correspondingly broad scope—covering technical education; research programs of national and state agencies, and current problems in various lines of production.

Education and Research

Most interesting of the discussions (in which the membership at large participated actively) were on university training of technologists, led by Dr. Neal Carter of the Canadian government's experimental station at Vancouver; and the relative functions of public and industry laboratories in fishery research, led by Maurice Stansby of the U. S. Fisheries Laboratory at Seattle.

The latter discussion emphasized the great need of more fundamental research, which is now hard to obtain—the attention of industry laboratories being taken up with specific problems, routine quality-control work and the like, while the time of governmental agencies also tends to go to the solution of special, local or individual problems in which more or less immediate results can be expected.

It was felt that fundamental research on broad underlying problems, for which private operators are not well qualified, is a more logical field for the governmental laboratories, and that they should give it their major attention. No formal resolution was passed, but the opinion of the membership was strongly and positively expressed.

Views as to education were more varied, but the preponderant opinion was that basic scientific background is more important in the training of the technologist than detailed knowledge of fisheries. Further discussion of this subject for next year was forecast.

Scope of Organization

Organization of the Pacific Fisheries Technologists was affected at a preliminary meeting in December, with Harry R. Beard, technical director of the New England Fish Co., as chairman. At the February meeting Dr. Neal Carter, director of the Pacific Experimental Station at Vancouver, was elected president for the ensuing year, with Dr. Lyle Swain of the same institution as secretary-treasurer. They, with Mr. Beard; Bruce Sanford of the Montlake laboratory, first secretary-treasurer; and three regional members—Roger W. Harrison of the Lyle Branchflower Co., Seattle; Russell O. Sinnhuber of the Oregon Seafood Laboratory, Astoria, and Dr. Wm. S. Hoar of the University of British Columbia—form the executive committee.

Regular meetings will be held annually, with provision for regional group meetings oftener if desired. It was decided to hold the 1951 meeting in British Columbia, in February or March—definite time and place to be determined later.

While Washington, Oregon and British Columbia are the territory specifically covered, membership is open to "anyone interested in fisheries technology," and the initial members include some from California, Alaska and Hawaii. Primary purposes of the organization are to provide a medium of exchange of technical and scientific information among those interested, and to collaborate with research and educational agencies engaged in fisheries work.

Problem Is Application Of Existing Knowledge

Need of greater practical utilization of existing knowledge was the main theme of opening remarks by Harry R. Beard, the chairman.

"Technologists can help themselves as well as the industry by selling the industry as a whole on the need for greater *application* of science, research and technical control," he said. "What is needed is to get our present knowledge into practice, from fishermen on through the chain of handlers to the ultimate consumers . . . Technical 'know-how' is available; the problem is to get it used." The technologist "must work, and work, and continue to work to get the results of his research into use."

"Only quality properly represented will give us our just share of the food dollars . . . All segments of the industry must get behind plans to improve *quality,* combined with informative labeling—and in this effort technologists can play a major role."

Activities of Official Research Agencies

Attention on the first day was centered on reports of the technological activities of the U.S. Fish & Wildlife Service (by Maurice Stansby, in charge of the Seattle station); the Fisheries Research Board of Canada (by Dr. Carter), and the Oregon Seafood Laboratory at Astoria (by Russell O. Sinnhuber, in the absence of Dr. E. W. Harvey, director).

Each report was elaborated by members of the respective staffs, and followed by a question-and-answer period in which all phases of the work came in for much enlightening discussion and constructive criticism. The variety and scope of current investigations was impressive, and should be an inspiration to the industry in its efforts for technical advancement.

In this period, also, J. G. Ellson (former canneryman, now in charge of the FAWS Pacific exploration program) gave a short but interesting talk on exploratory work planned for the new vessel *John N. Cobb.*

This was followed by the open discussions of university training and the work of governmental and industry laboratories. Final sessions were devoted to discussions by

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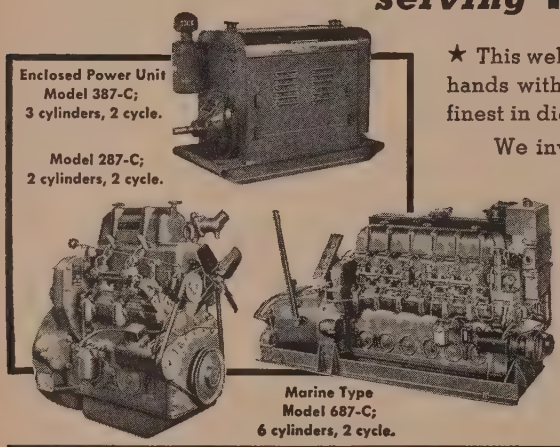

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groups specializing in specific fields: fish meal and oil manufacture, including stickwater utilization, led by Dr. Roy Elsey, research director of British Columbia Packers, Ltd.; seafood canning and preservation (other than freezing), led by Dr. R. W. Clough of the Northwest Branch, National Canners Association; fresh and frozen seafoods, led by John Dassow of the F A W S laboratory at Seattle, and by-products other than meal and oil, led by Roger Harrison of the Lyle Branchflower Co.

Organizations represented in Pacific Fisheries Technologists, together with the individuals attending the recent conference in Seattle are:

Abbott Laboratories, Seattle—Gene Swanson;

Alaska Fish Oil Extractors, Auburn, Wash.—Lyle Anderson;

E. H. Bendiksen Co., South Bend, Wash.—Geo. D. Esveldt;

Lyle Branchflower Co., Seattle—Roger W. Harrison, John L. Shackleford, Dirk Verhagen, Milton Narod, Jim Drury;

B. C. Packers, Ltd., Vancouver, B. C.—Dr. C. R. Elsey, David H. Barbour, Peter A. Sunderland, Norman L. Armstrong;

California Press Manufacturing Co., San Francisco, Calif.—A. W. Wilde;

Canadian Fishing Co., Ltd., Vancouver—G. F. Boothby, L. G. S. Ford, Dr. Geo. R. Halpern, R. Hammond, O. H. Newmarch, Sun W. Yip;

Curtis & Tompkins, San Francisco—H. DeBussieres;

James Farrell Co., Seattle—Walter C. Hanson;

Fishery Research Board of Canada (Pacific Experimental Station, Vancouver)—Dr. Neal M. Carter, Dr. H. L. A. Tarr, Dr. Lyle A. Swain, Otto C. Young, A. W. Lantz, Dr. B. E. Bailey, P. J. Schmidt, J .S. M. Harrison, Stewart W. Roach;

General Testing Laboratories, Ltd., Vancouver—Trevor P. Clark;

Hawaiian Tuna Packers, Ltd., Honolulu—Fred Jermann.

Hercules Blue Co., San Francisco, and *Tyrell Distributing Co.,* Wenatchee—C. D. Dolman;

Hooker Electrochemical Co., Tacoma—R. F. Goettling;

International Fisheries Commission—F. Heward Bell;

Laucks Laboratories, Seattle—J. M. Kniseley;

Libby, McNeill & Libby, Seattle—L. P. Callahan and Max Patashnik;

Edward Lipsett, Ltd., Vancouver—P. J. G. Carrothers.

Merck & Co., Inc., Seattle—W. C. Kahle;

National Canners Association (N.W. Branch)—Dr. E. D. Clark, Dr. R. W. Clough, O. E. Shostrom and W. V. Yonker.

New England Fish Co., Seattle—Harry R. Beard and Elzie Reed;

Refrigeration Research Foundation, Berkeley, Calif.—Dr. H. C. Diehl;

San Juan Fishing & Packing Co., Seattle—Hugh V. Jones;

Sea Foods Laboratory, Astoria—Dr. E. W. Harvey, Russell O. Sinnhuber, Duncan K. Law;

The Sharples Corporation, Seattle—R. L. Dyer;

South Bend Oyster Co., South Bend—Lynn G. McKee;

State of Washington, Department of Fisheries—Robert K. Pedersen;

United Fishermen's Cooperative Association, Vancouver — Geo. N. Cull and Ronald F. Houston;

U. S. Army, 6th Area Food Laboratory, Seattle—Robert B. Anderson and Sgt. E. F. Savoie;

United States F. A. W. S. Technological Laboratory, Seattle—Maurice E. Stansby, Dr. G. Ivor Jones, C. J. Carlson, Wm. Clegg, John Dassow, Geo. M. Pigott, Roy C. Stevens, Ernest Dietrich, Miss Katherine L. Osterhaug, Mrs. Thomas Edwards, Mrs. F. G. Hazeltine, F. Bruce Sanford, Miss Neval L. Karrick;

U. S. Food & Drug Administration, Seattle office—Henry M. Risley;

University of British Columbia—Prof. Wm. S. Hoar;

University of California — Dr. Lionel Farber.

University of Washington School of Fisheries — Dr. Richard Van Cleve, Dr. W. H. Hastings, John A. Coates, A. F. Dmello, John E. Halver, Adam Reid, Clifford E. Soderstrom;

Washington Laboratories, Inc., Seattle—J. A. Brown, Geo. W. Burchard, Jr., Donald M. Holdsworth.

EARLY TUNA FISHING LIGHT

San Diego canneries received 4,099 tons of tuna in February and produced 181,331 cases. The raw fish breakdown was: Yellowfin, 2,457 tons; Skipjack, 1,502; Bluefin, 56; bonito, 53, and yellowtail, 31 tons.

With all lay-up restrictions off as of March 1, the entire fleet was either on the high seas or preparing for a trip. Three new clippers joined the fleet: *Starcrest* (former *Vera M*) for French Sardine Company; *Hortensia Bertin,* for Van Camp Sea Food Company; and *Marilyn Rose,* for Coast Fishing Company.

Returning tunamen reported fishing conditions none too good anywhere. A short run at the Galapagos Islands in mid-February helped load a few clippers, but fishing off Costa Rica was poor.

Live bait supplies were uncertain also. The main source of supply, the Gulf of Panama, was closed by that government until April 17. M. O. Medina and Harold Cary, American Tunaboat Association, spent several weeks in Panama, in an effort to straighten out the confused issue.

Union Fishermen's Co-op. Elects Officers

At a meeting recently of the Union Fishermen's Cooperative Packing Co. of Astoria, C. O. Moberg was re-elected president; Arvo Niemi was re-elected vice president; Uuno Koskelo, second vice president, and Charles Anet, secretary. New directors of the firm are Elmer Astala, and Robert Cronen, who will serve on the board with Charles Anet, Melvin T. Wick, Tom Jorgensen, Uuno Sjoroos, C. O. Moberg, U. Koskelo and Arvo Niemi, all of whom were re-elected. Mr. Anton Sorenson retains his position as manager.

Scripps Biologist Reports Heavy Sardine Spawning

An extremely heavy spawning of sardines off Lower California, in contrast with light spawning off Southern California was reported by Carl L. Hubbs, marine biologist, Scripps Institute of Oceanography, last month. This, according to the scientist, may not only augur well for prosperous sardine operations this year for both the Mexican and Southern California industry, but will provide food for larger fish, including tuna.

KARL DEHN, head of Dehn & Co., Inc., Seattle canned fish brokers, returned from his convention trip in mid-February, and on Feb. 21 became the proud grandfather of a boy—the son of *ALAN DEHN*, who has been associated with his father in the business for several years.

WM. J. CLEMENCE, president of the Copper River Co-Op Co., Cordova, returned to Alaska early in March after spending some time in Seattle, where he conferred with Dehn & Co., his company's sales agents.

A. G. Clark Jr. Chosen

A. G. Clark, Jr., manager of the Oregon Marine Supply Co., Portland and Astoria, was elected to the board of directors of the Pacific Coast Ship Chandlers Association at its annual election in February.

He succeeds the late Carl Thomas of this same company.

Other officers and directors were re-elected as follows: C. K. Howe of Weeks-Howe-Emerson Co., San Francisco, president; I. L. Freeman, Alameda, Calif., secretary-treasurer; directors—Edward Cunningham, Pacific Marine Supply Co., Seattle; L. D. Adams, C. J. Hendry Co., San Francisco; H. H. Haviside, The Haviside Co., San Francisco; Dave Honeyman, Johnson & Joseph Co., San Francisco; Ray Mitchell, Marine Hardware Co., San Pedro; Jack Nuttall, The McCaffrey Co., San Diego.

Astoria Vessel Owners Hold Election

At a meeting of the Astoria Offshore Fishing Vessel Owners Association, held in March, the following officers were elected: Fred Wolleson, president; Nick Zorich, vice president and Veikko Romppainen, treasurer. Included on the board of directors are Unno Uunila and Henry Sigurdson.

An active and busy year is anticipated with problems of major importance on the roster, and with the matter of foreign imports of various fisheries products being of paramount interest to the group. Wolleson is owner-operator of the shark boat *Argo;* Zorich is owner operator of the dragger *Westward* and Veikko Romppainen is owner and skipper of the dragger *Valhalla II,* all operating out of Astoria. Mr. Uunila has the troller *Rose M,* and Henry Sigurdson owns both the *Active* and the newly built *Bell Buoy,* both crab boats fishing out of Warrenton, Ore.

B. C. Herring Hits Near Record With 182,880 Tons

British Columbia herring fishermen wound up the 1949-50 season in March with a near-record production of 182,880 tons.

This compares with the peak figure of 188,760 tons in 1948-49, but it was substantially in excess of previous years' catch.

Nearly all the fish caught were consigned to reduction plants, and only about 76,000 cases were canned, in sharp contrast to the wartime and early postwar years when, beginning in 1941, more than 1,000,000 cases of canned herring were packed in British Columbia for seven successive years.

With the United Kingdom and major overseas relief agencies out of the market, the comparatively small pack of canned herring will probably be disposed of in the Orient, where most of the 1948-49 pack eventually was sold through Hongkong.

Most productive area during the season recently terminated was the Central, where the catch at Feb. 25 was 41,513 tons. The Northern and Lower East Coast areas were close behind with 40,300, tons each, followed by the west coast of Vancouver Island, which at that date had yielded 37,275 tons. There are no restrictions on the west coast herring fishery.

About 3,280 tons of herring were dry salted during the past season, for the first time since 1941 when 3,850 cwt. was processed in that way for shipment to the Orient.

The best years for the dry salteries in British Columbia were in the mid-20's. In the 1925-28 period inclusive more than 4,000,000 cwt. were dry salted, mostly by Japanese operators for export to China. Last season's salt pack was the largest since 1934.

United Trollers of Alaska Get National Charter

Local 100, United Trollers of Alaska, which broke away from the International Fishermen and Allied Workers of America early this year, was granted a national charter by the C.I.O.

The United Trollers had been affiliated with IFAWA for three years prior to the break, which came when IFAWA was considering a merger with the International Longshoremen's and Warehousemen's union.

Named as charter members of Local 100, United Trollers of Alaska, on the recently received certificate of affiliation were Larry Clark, Ketchikan; B. H. Manery, Juneau; Oscar Davisson, Craig; William Jordan, Wrangell; F. Wetche, Pelican; and Andy Barlow.

Eureka Co-op. Takes Over Halibut Producers

Among recent changes in the commercial trade at Eureka, the Eureka Cooperative Fisheries has taken over the Halibut Producers Cooperative Agency. Formerly located on the Union Oil docks, the latter concern closed down some time ago. Cooperative is now receiving all deliveries formerly consigned to the Halibut Producers.

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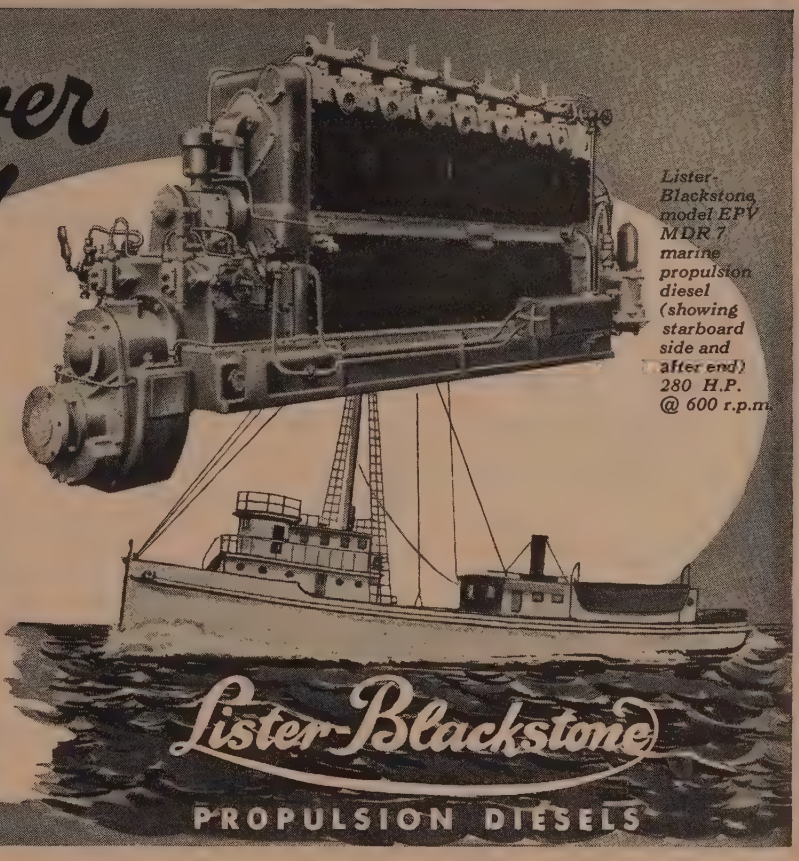

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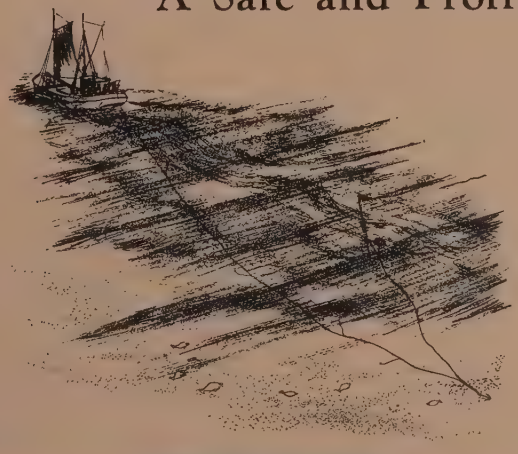
Extends to the Halibut Fishing Fleet A Safe and Profitable 1950 Season



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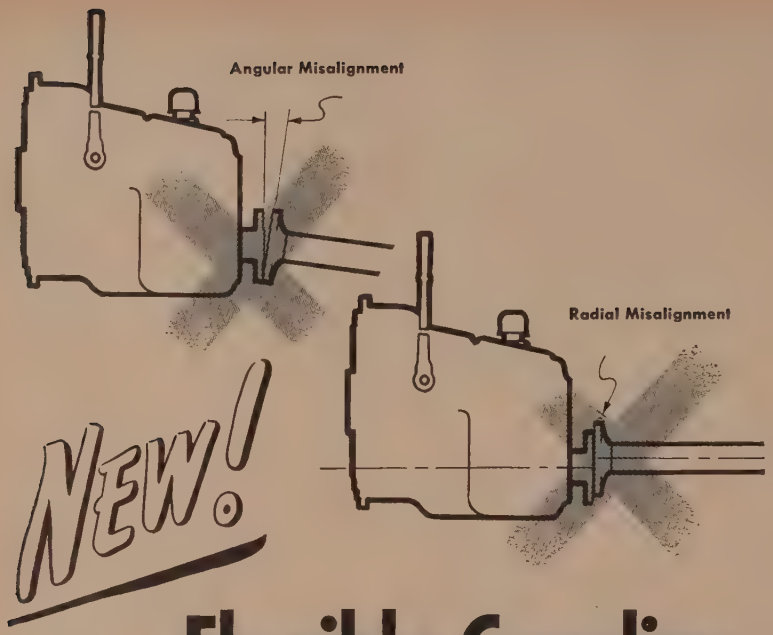
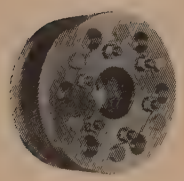


NEW!

Flexible Coupling
absorbs misalignment



Even slight hull distortion—from battering seas or variations in cargo—can cause misalignments in the power train which lead to excessive wear and breakdowns.

Many misalignment troubles of this type can be eliminated easily and inexpensively with the *new* Twin Disc Flexible Coupling. This coupling consists of two steel plates, one bolted directly to the output flange on the marine gear, the other bolted to the existing propeller shaft mating flange . . . with a tough but pliant separating leather ring. Alternately spaced bolts prevent metal-to-metal contact so that each plate drives only into leather.

The inherent "give" of the leather provides the flexibility critically needed at this point and assures a link that permits efficient power transmission despite reasonable misalignment between marine gear and propeller shaft. Only a slight shortening of the shaft is required to insert the coupling.

Sizes are available to suit 40 to 180 hp engines with marine gear flanges from 7½″ to 9″ outside diameters. For information, ask for Bulletin No. 160. TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).

Robt. Houssel, Van Camp Board Member, Dies

Robert Houssel, 42, member, board of directors, Van Camp Sea Food Company, died, February 12 at a Long Beach hospital. Bob Houssels was the son of Bismarch Houssels, one of the founders and, at the time of his death in the early 30's, executive vice president.

The younger Houssels was manager of the San Diego cannery prior to the war and was one of the cannery executives responsible for developing the San Diego plant into the largest of its kind in the world at that time. Later, although continuing as a member of the board of directors, he has not been very active in the business administration.

Pacific Firms Supply African Reduction Plant

A complete reduction plant has been built and shipped to a cannery located on the west coast of South Africa by P & L Welding & Machine Works, Anaheim, Calif., through the company's foreign agents, Wilbur-Ellis Company, San Francisco.

Designed for reduction of pilchards and other ocean fish into fish meal and oil, the "package" contains the most modern equipment designed and built by the company. Included is a new type of cooker, the P & L dewatering presses, hammer mills, sacking equipment and the new type of airlift drier, which was originally developed and installed at Terminal Island Sea Foods, Ltd., Terminal Island. The plant has a capacity of 10 tons of fish per hour.

Mothership "Spicewood" Sails for Costa Rica

Tuna mothership activities were resumed in Southern California with the sailing, February 25, of Van Camp Sea Food Company's refrigerated vessel *Spicewood* from Los Angeles harbor. In command was the original skipper, Capt. Carl Carillo.

The vessel will base at Puntarenas, Costa Rica. A fleet of purse seiners will act as feeder boats, among these *Columbia, Cavalieri, Discovery* and others to be assigned as the season progresses.

Rebuilds Sardine Lines

California Marine Curing & Packing Company, Terminal Island, is rebuilding its sardine and mackerel lines, with additional cutting machines being installed, according to Max J. Gorby, president of the tuna, sardine and mackerel-packing concern.

No Large-Scale Whaling Planned for Humboldt

For the first time in several years, there will be no extensive whaling operations out of Humboldt Bay this season, according to Herman Foland, co-operator of the Fields Landing Plant with Gilbert Hunter. Foland says that later in the year the company may try for a few whales but not on any large scale.

Meanwhile, the Fields Landing plant is busy this season making fish meal, reportedly finding a ready market in various parts of California.

Part of the plant was destroyed by fire early last summer. Since that time the two whaling craft — the *Dennis Gayle* and the *Lynnann* have been working in the general trade, chiefly bottom fishing.

Scudder Leaves Service

H. C. Scudder, who has been fishery management agent for the Fish and Wildlife Service at Juneau for some years, has been transferred by the Department of the Interior from the Fish and Wildlife Service to another of its agencies—the Alaska Native Service of the Bureau of Indian Affairs, where he will serve as a "fisheries specialist," with duties not yet fully disclosed.

Lowell Heads Juneau Vessel Owners Assn.

John Lowell of the *Fern II* was elected president of the Juneau Vessel Owners' Association for 1950. Chosen vice-president was Larry Fitzpatrick, owner of the *Ruby*. Bill Odell, part owner and skipper of the *Sitka* was elected secretary.

Harrison Visits Coast

E. W. Harrison, president of Wm. H. Stanley Co., Inc., New York sales representatives for Columbia River canned salmon and California canned fish products, was a Pacific Coast visitor last month.

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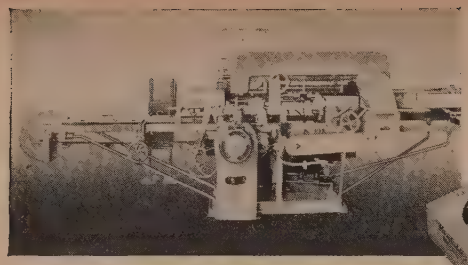
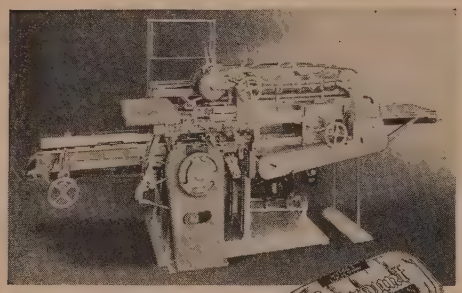


MODEL FF



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Both machines are adjustable for various sizes, have a speed of up to 100 packages per minute, and require only one operator.

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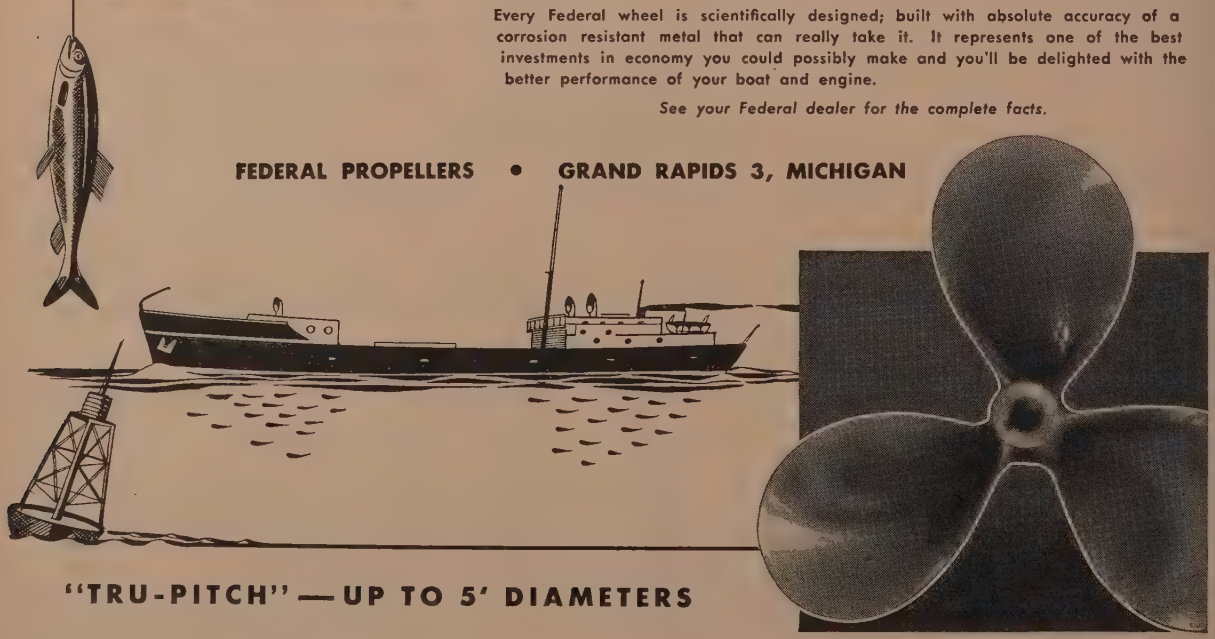

"TRU-PITCH" — UP TO 5' DIAMETERS

Upper Fraser Spawning Gravels Heavily Seeded by 1949 Sockeyes

Cheering news of liberal Sockeye escapement to the upper areas of the Fraser River system is contained in the annual spawning report of A. J. Whitmore, chief supervisor of fisheries, Vancouver. There was good escapement to all the river's upper areas, except the Chilko.

This development was regarded by Mr. Whitmore as "of outstanding importance." There was, for instance, a tremendous increase in the number of Sockeyes reaching the Prince George area of the Fraser basin, compared with the previous two cycles. An estimated 700,000 Sockeyes ascended the Stuart Lake system, compared with 50,000 in 1945 and 12,000 in 1941.

The report has a special significance because it describes the return from the first runs to pass through the Hell's Gate fishways, which were completed in 1945 by the International Pacific Salmon Fisheries Commission.

Although the run was not of the same magnitude as escapement in some other parts of the Fraser region, Mr. Whitmore reports as particularly interesting the return of 11,000 Sockeyes to the Horsefly River and 400 Sockeyes to Mitchell River in the Quesnel system, once the greatest Sockeye producer of the Fraser River but during the past 30 years virtually non-existent as a fishery.

"The rehabilitation measures of the commission, as indicated by 1949 spawning ground returns, are meeting with marked success," comments Mr. Whitmore, who is himself a member of the Commission.

Skeena Escapement Fair

To the Skeena River watershed the escapement of Sockeyes from the moderate run which passed through the commercial area is regarded as equitable. The escapement to the Babine area, principal spawning ground of the system, was large; and satisfactory supplies ascended the Bulkley River. Medium to heavy runs were reported in such sections as Bear Lake, Kispiox, Kitwanga and Kitsumgallum, with spawning only fair at Lakelse. Sockeye supplies to the spawning areas of Rivers Inlet were satisfactory as to volume, but the fish individually were small.

So far as Springs are concerned, there was a satisfactory escapement last year to the Fraser watershed, especially to the Prince George and Kamloops areas. Supplies of Cohoes were generally adequate, with moderate seeding of practically all streams along the northern coast, fairly good in the Vancouver Island and adjacent mainland streams and average in the Fraser River area.

Pink supplies on the spawning grounds in District No. 2 were generally satisfactory, Mr. Whitmore reports, and above the brood year level; heavy to the Naas, Lower Skeena and Bella Coola areas; moderate but also in excess of the brood year in the Butedale and Bella Bella areas. In District No. 3 spawning in the mainland streams of the Alert Bay sub-district was generally good. A decline in escapement of Pinks to the Fraser spawning grounds was again recorded, the escapement in the brood year of 1947 being less abundant than in the parent year of 1945. Even with special restrictions on commercial fishing, escapement in 1949 was 30 to 50 per cent below that of 1947.

Only moderate supplies of Chums were found in the principal areas such as Butedale, Bella Bella and Bella Coola. Chum escapement to the Fraser, particularly the early run, was the best in years.

1948 Cycle Dominating

Reverting to Sockeyes in the Fraser watershed, Mr. Whitmore reports that an estimated 60,000 Sockeyes reached the Chilko spawning area, a decrease of about 140,000 from the brood year of 1945, although the run was well distributed.

"Biologists of the Commission do not believe this is indication of reduction of Chilko area productivity," states Mr. Whitmore; "rather, that 1948 cycle is emerging as the dominant year, with 1949 cycle becoming less dominant."

In the Quesnel system Sockeye supplies were far larger than in any recent year, although still on a small scale in comparison with the large runs of 30 years ago. In the Kamloops area the early run of Sockeyes was distributed between Raft River and the Streams tributary to Shuswap Lake in considerably greater numbers than in the brood year. In the Lillooet area, a run of upwards of 95,000 Sockeyes spawned in the Birkenhead River compared with 80,000 in the brood year 1945. Jacks comprised about 15 per cent of the run.

South Calif. Boat Owners Form Association

Southern California Commercial Fishing Boat Owners association, has been formed at Los Angeles harbor, to include mainly the Albacore fishing fleet. Buster Boyer, owner of the *Marietta,* is initial president. Forty owners were present at the first meeting, held at Wilmington, January 29.

The organization is similar in intent to the Commercial Fishing Boat Owners of San Diego, formed last year to achieve recognition as an owning body and to secure berthing facilities, etc., and which has been most successful.

Other officers of the Los Angeles harbor association include: vice president, Russell Farnell, *Dorothy R;* secretary-treasurer, Jerry Butters, *Atomic Girl.* Board of directors: Fred Delight, *Blanche Lee;* Gordon Armor, *Eva;* Earl Garrett, *Jon-Tru;* Richard Karlson, *Millie S;* Charles Henderson, *Sara Jane;* Bill Wagner, *Emmie Lou.* The latter is serving as publicity chairman.

Packaged Sole Fillets Are Seasonally Short

Definite shortage in supplies of consumer-packaged frozen sole was reported by Pacific distributors in March. They said that the condition was a seasonal one, resulting from bad weather and its handicap on operations, as well as the fact that early spring trawling takes few sole. Such dragging as was possible in mid-March did not produce much beside rockfish.

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SEASIDE SUPPLY STORES, INC., San Pedro, Calif.

FISH BINS AT WATERFALL

Are Fine Example of Modern Salmon Handling

Sanitation, proper handling of fish and economy of movement were the guiding principles in design and construction of the fish-house at the Nakat Packing Corporation's Waterfall salmon cannery, built in 1935 and improved from time to time since, keeping fully abreast of current developments.

This plant, and especially its fish-house layout, has served more or less as a model for some of the newer Alaska canneries, and is still regarded as one of the finest in Alaska from the standpoint of sanitation and all-round efficiency.

Easy To Clean Throughout

The fish-house occupies the outer 100′ of the main cannery building, 60′ wide; the bin section taking up about 50′ at the outer end, and being separated from the rest of the plant by a glass partition from the top of the face of the bins to the ceiling, which is 15½′ high throughout the ground floor of the building, where the cannery proper is located. Purpose of this is to keep steam and heat from the cannery from getting over the fresh fish in the bins.

The building is of mill construction, and the entire ground-floor interior is sealed throughout with t & g, painted with enamel to facilitate cleaning. Colors are Nile green to about 4½′ from the floor and cream above, with a red stripe between, giving a bright, cheerful appearance.

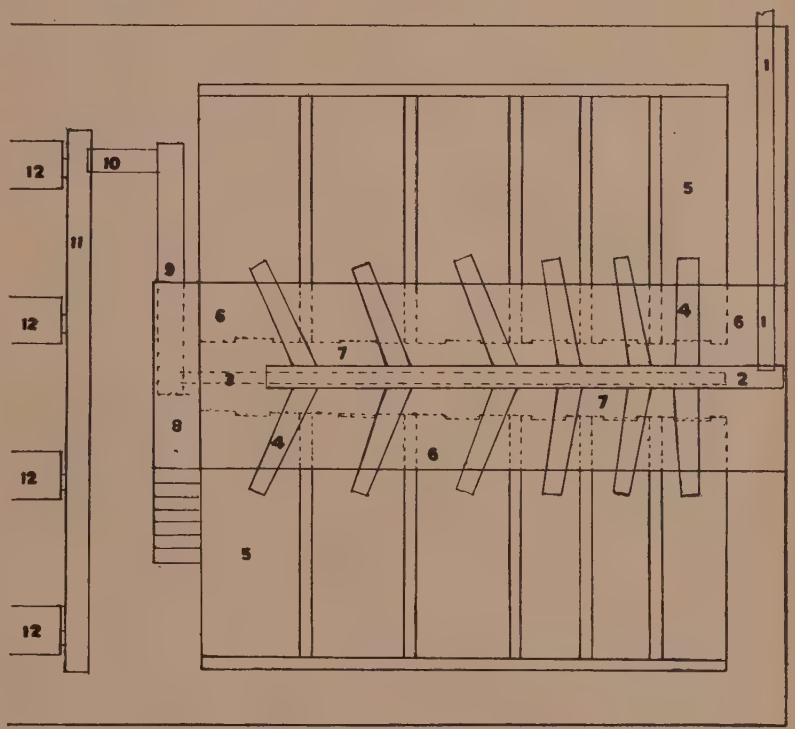
Floor of the fish-house, tightly laid with 3x6″ t & g, is built with a slope of 1″ in 90″ to an open gutter down the center, with removable slat cover for easy cleaning. There is no floor, however, under the receiving bins, which are completely open to the bay beneath to avoid any place for lodgment of water or gurry: the space around the bins being boarded down to the floor to prevent men or tools from falling through.

Another feature is the provision of plenty of clear space. A 5′ walk at floor level runs all around the bin section, and the whole fish-house is so arranged that a man can reach practically every part of it, walking upright.

Tight, Sloping Bins

The receiving bins are arranged in two rows of 6 on either side of a central passage 6′ wide, with a metal sluiceway down the center leading to the butchering department: three bins on each side being 9 by 21′ and the others 6 x 21′. The larger ones hold about 15,000 salmon each, figuring 10½ to 11½ fish per cubic foot. This arrangement not only facilitates segregation of fish by species, but gives flexibility in separating trap from seine catches, or lots delivered at different times or from different grounds. Thus, with proper coding of cans, the whole history of any can may be traced, from catching of the fish to the consumer's table.

Discharge end of the bins is raised 1′ above floor level, with a slope from the back of 3′ in the 21′ length. They are built of 3 x 12″ t & g, driven tight with a string of caulking cotton between: wide planks being used to reduce the number of seams. Side planking is set vertically; bottom planks running lengthwise and extending in front to the central sluice. The bottoms are hot-coated with asphalt, making a very smooth, lasting surface, easy to repair; while the sides are white enameled.



Layout of Fish Bins and Appurtenances at Waterfall Cannery—(1) Overhead flume from elevator; (2) Distributing conveyor; Sluiceway (3) at floor level below; (4) Chutes from conveyor to bins; (5) Receiving bins: six 6x21′, six 9x21′; (6) Overhead platform under conveyor and chutes, and over front ends of bins; (7) Passage between bins, under platform; (8) Fish-house control platform; (9) Elevator from sluiceway; (10) Chute; (11) Belt conveyor to "Iron Chink" hoppers; (12) Hoppers.

Interior posts required to stiffen the side walls are beveled to prevent lodgment of fish; and the lower corners beside the gates are filled in with fitted planking so that no fish can lodge there, enabling the bins to be easily emptied and cleaned with a little sluicing. Outer planking under the filled-in corners is cut away, in line with the purpose to leave no place in or under the bins where water can collect.

One Man in Charge

Gate openings, set in the center of each bin, are 36″ wide, allowing easy passage of fish without cramping or twisting; and gates slide vertically, controlled by lever or hydraulic hoist. They are regulated by one man, stationed in the central passage, who is responsible for tending and emptying the bins and keeping them clean.

To facilitate both inspection and passage across the bins, all partitions between them are topped with a 2 x 12″ plank walk, painted dark brown and covered with spiller web to prevent slipping; and a 3 x 12″ walk extends across the back ends about 4′ below the top of the bins. Over the central passage and inner ends of the bins, about 7′ above floor level and under the distributing conveyor, is a platform almost 16″ wide on which the sorters work. This is built of tight t & g, with a 2″ slope outward from the center line to keep it dry.

Fish Distribution Layout

In operation, fish are received over an elevator of conventional type, located about 170′ away down the face of the dock, and are brought in by fresh water through an overhead metal flume, discharging onto the distributing conveyor which runs from the outer end of the building, at convenient height above the platform between the rows of bins. This conveyor, 24″ wide, consists of 3 widths of "SM-113" chain in a wooden trough, driven independently by a 5-hp. Fairbanks-Morse motor through Falk reducer, located at the inner end.

The conveyor bed for several feet from the end of the incoming flume is slatted for drainage of the sluicing water. The bed for the return run of chain is sloped down toward the outer end, where any slimy water carried by the chain is drained off to waste. Chain, it is pointed out, is quite satisfactory for conveying *round* fish; but it tends to mutilate *dressed* fish, so that all conveying after butchering is by rubber belts.

A number of sorters are stationed on the platform along the conveyor, operating take-offs leading to the chutes, by which fish of the various species, etc., are deposited near the center of the appropriate bins. These chutes lead down so that the fish have not far to fall to the bin floors. They are of 12-gauge steel, bent from one piece with rounded corners, stiff enough so that no supporting members are required, and white enameled for easy cleaning.

Control Platform In Front

An important feature is the control and inspection platform, built as an overhang of the sorting platform and at the same 7′ level—running about 4′ from the bins into the butchering department, and connecting with the part over the bins by a door through the glass partition.

From it one can look down into the "Iron Chink" hoppers and get a complete view of the entire fish-house; and on it is stationed a man whose function is to control the whole flow of salmon between flume and cannery, with levers and push-buttons at hand regulating the elevator from the bins, conveyor to "Chink" hoppers, and gates of the hoppers. By a signal system, this man also directs the bin-tender in letting salmon out of the receiving bins. Steps at one end go down to the fish-house floor.

Fish from the bins are washed down the central sluiceway with fresh water, to the foot of an inclined bucket elevator rising some 12′ toward one side of the building and discharging, through a steep chute about 6′ long, onto a belt which distributes them among the four "Iron Chink" hoppers. To prevent loss of fish at the foot of this

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RUFF-N-TUFF EUREKA SUIT has a 30″ JACKET—is light and roomy to let you move easily. Corduroy collar. Inside fly-front has rust proof, nickel-on-brass ball and socket fasteners. OVERALLS have bib-front, adjustable elastic suspenders, cut-off strips to shorten legs. Small, Medium, Large.

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"Time to Take Offensive For Reductions in Rates"

E. A. Ruthford

"Seeking rate reductions, instead of fighting increases, is the order of the day in the fish industry's transportation cost program," E. A. Ruthford, vice president of the San Juan Fishing and Packing Co., and chairman of the National Fisheries Institute Traffic Committee, declares in a ringing pre-convention challenge to the N.F.I. membership.

"Many in the fish industry are finding that what formerly was their margin of profit is now going to pay transportation bills . . . Slowing-down of sales frequently can be traced to excessive transportation charges. You can't always pass-'em-along."

Mr. Ruthford cites the "Monark egg case" as a prime achievement of 1949 in the industry's efforts to attain lower transportation costs. He declares it was the first reversal in a long time during which transportation charges have mounted and mounted without a break.

As applied to the fish industry, this decision by the Interstate Commerce Commission classed filleted fish, shucked oysters, etc. as commodities which could be transported by trucks unregulated by the I.C.C.

Practical application of this case in shipping frozen fish from Seattle to California is cited by Mr. Ruthford, who gave the rates for shipping fish to California in regulated trucks prior to the Monark decision, against those by responsible carriers in unregulated trucks as follows:

Seattle-SanFrancisco, old rate $1.20
new rate 1.00
Seattle-Los Angeles, old rate.... $1.40
New rate.... 1.30

Similarly, he quoted rates east as follows:

Seattle-Chicago, old rail rate $2.67, plus approximately 30c refrigeration charge, Total .....$2.97.

Seattle-Chicago, new rail rate, $1.75, plus approximately 30c refrigeration charge, Total .....$2.05.

Seattle-Chicago, new truck rate, no refrigeration charge,.....$2.00

Seattle-New York, $3.38, plus approximately 40c refrigeration charge, Total .....$3.78.

Seattle-New York, new truck rate, no refrigeration charge, Total....$3.00

Mr. Ruthford is a great believer in the professional approach to problems of transportation charges, and he cites the strong case developed and presented in the express icing charge case, in which the industry, with the guidance and steering of traffic experts, presented powerful argument backed by documented data. He says:

"Of course, the stakes were high in this icing charge case. Our estimate is that the 20% increase the Railway Express Agency seeks would amount to $4,000,000 per year. If we were to lose this case altogether, as of right-now, we still would have saved $5,000,000 in charges over the past year-and-a-quarter by our resistance."

Frozen Fish Price Break Sharply in East

Prices of frozen salmon and halibut broke sharply by from 3 to 5c per lb. in Boston and New York in March—an extraordinary condition for the middle of Lent.

Reports indicated that the reduction came about as result of a concentration of re-shipments of stocks of frozen fish from the Middle West —stocks which had been considered as "sold." Some elements in the Mid-West trade evidently were a bit long on inventory and shipped to the Eastern outlets. Concentration of such "surprise" offerings tipped the market to the low side.

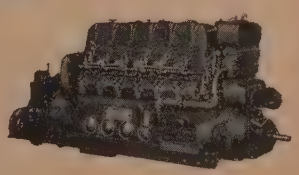
Fisherman calls it...

"a revelation"

the New P&H MARINE DIESEL 2-CYCLE

The "Fannie C. Angeli" making knots with its new P&H Marine Diesel.

This is the praise Allen Gollet, President of Freeport Fisheries, Freeport, Texas, and an experienced diesel user has for the new 2-cycle P&H Marine Diesel. His 50-foot snapper boat "immediately showed new speed and a response to control that was a revelation."



Six-cylinder, 2-cycle P&H Marine Diesel, 145 h.p.

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P&H Diesels with all major castings of lightweight, corrosion resistant alloys combine lower weight per horsepower with operating efficiency that puts more profits in your fishing. These are advanced diesels — with an ease of servicing that's unmatched by any other. In just 40 minutes you can replace an entire cylinder head and piston assembly — *without touching the pan!*

Get full information today on these advanced, more dependable and economical power plants. P&H Marine Diesels are built on 1, 2, 3, 4 and 6 cylinder models, 20 to 145 h.p.

Engine room of the "Fannie C. Angeli." Note the compactness of this powerful P&H 6-cyl. Marine Diesel.

P&H DIESEL DIVISION
HARNISCHFEGER CORPORATION
PORT WASHINGTON WISCONSIN, U. S. A.

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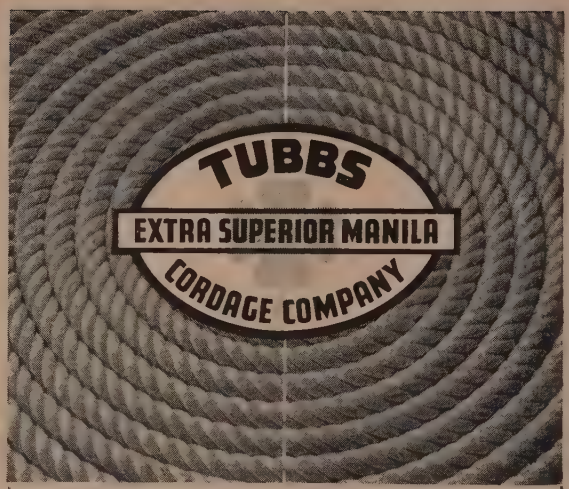

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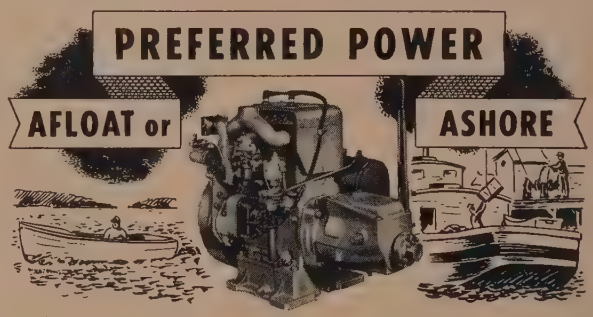

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Afloat or ashore, you'll see Wisconsin Heavy-Duty Air-Cooled Engines standing-by . . . powering efficient equipment and working as separate power units . . . making the longest hauls over the longest period.

Not only are the new 4 to 13 hp. Wisconsin Air-Cooled Inboards superior engines with superior features and recognized as such after only two years on the market since the war . . . you'll also find that Wisconsin Industrial Engines have an even more famous reputation. You'll find them powering such equipment as pumps, compressors, conveyors, lift-trucks, generators, winches, or handling any of the hundred and one power tasks in the Fisheries Industry wherever the accent is on successful, profitable operation!

4-cycle single-cylinder, 2-cylinder, and V-type 4-cylinder models, 3 to 30 hp. . . . 4, 5.8, 7½ hp. single-cylinder and 13 hp. 2-cylinder Marine Models. Write for Bulletin S-116 and name of nearest distributor.

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CANNED FISH No. 4

California Mackerel Pack For Year Reaches 919,000 Cases

Southern California's mackerel fishery produced 44,240 tons during 1949, canning 864,951 cases. This, with the addition of Northern California's 2,418 tons, and 54,288 cases, brought the state's tonnage to 46,658 tons and a grand total of 919,599 cases for the year, fourth in volume among American canned fish items.

The industry thus fell 97,515 cases behind 1948, which saw 1,017,114 cases packed. The southern district showed a decrease of 3,648 cases while Monterey, only producing port in the north dropped sharply below the 1948 figure of 149,515 cases by 95,227 cases.

Breakdown of the pack for all of California was: Talls, 893,227 cases; ½s, 22,827; misc., 3,545 cases. Production of pet food for Southern California, which alone packed this product, reached the impressive figure of 881,111 cases. Some of this was mackerel, both Pacific and Jack, although sardines and other species were largely used also.

Division of species, Pacific and Jack in the regular pack, showed about even tonnage during the year, but with Pacific having the advantage in the case yield. Pacific's tonnage produced 517,154 cases, while Jack, of which canning did not get under way much before March, produced 347,797 cases. Monterey's tonnage of 2,418, producing 54,288 cases, talls, was all Jack mackerel.

Monterey mackerel pack in the past three years has declined. In 1947 the pack was 164,790 cases. It declined in 1948 to slightly less than 150,000 cases and in 1949 production was less than 40% of the previous year.

San Diego has ceased to be a factor in mackerel packing since 1944, but in years previous to that had often seen production above 100,000 cases annually. This port, with minor exceptions, now devotes itself entirely to tuna packing.

Looking at the fishery itself during 1949, the fishermen began well, with raw prices of $60-50, Pacific and Jack in force. However, as the season entered the heavy tonnage period in the fall, raw prices declined to $50-40 and finally, especially to scoopers. fishing for Pacific, to much lower than that.

Demand for canned mackerel, domestically was fairly brisk throughout the year until the coal and steel strike in the country's industrial areas where mackerel is a large seller, threw the canned industry into confusion. At the end of 1949 quotations, f.o.b. cannery were fairly steady at $6.25, Pacific; $5.75, Jack, basis of talls, 48 cans.

The new year opened with very little mackerel tonnage with scoopers not yet in action, and with seiners normally switching to mackerel mostly engaged with end-of-the-season sardines. Packers were considered pretty well cleaned up on Pacific but there were some Jack stocks on hand.

Domestic Crab Price Firm; Russian Revised

Seattle sellers of domestic canned crab reported the price firm at $23 to mid-March, with production far behind actual orders.

Imported Soviet Russian crabmeat pricing was revised a couple of times during March, however. Top grade was reported reduced from $56 to $52 per case of 8 doz. halves; while the second grade was cut from $47 to $44 per case.

Imports of Russian crab at Seattle are said to have reached 19,000 full cases by mid-March, with about twice this quantity landed at Boston.

Current advices from the Far East estimate that Russian crab canning currently is running at about 500,000 cases annually. Whether these cases are counted on the basis of 8 doz. or 4 doz. is not yet plain.

Russian crabmeat is coming into this country through two different channels—by direct import from Siberia to the Pacific States; and by re-shipment from England.

Under the latter type of trading, England gets canned crab—which she doesn't want—from Russia in barter for goods; and then turns around and re-sells the Russian crab to the United States for dollars.

NEW RAZOR CLAM RECORDS SET FOR SHORT SEASON AND LONG PRICES

Seventeen days out of a nominal 90-day season served to take the entire quota—and more—set for the Washington razor clam fishery.

The season was closed March 17 with the 225,000-lb. quota already exceeded.

The fiasco extended to pricing as well as rate of dig. Bidding for razor clams for crab bait carried the price to a fantastic figure of 32c per lb. at the peak. Digging was confined to the Copalis beach, the only stretch of the coast which had a commercial quota. With from 3,000 to 4,000 diggers active on favorable days, it was estimated that the quota would have been filled in the first week if bad weather and heavy surf had not handicapped operations.

Only one clam cannery was active. This was the Plumb and Edney plant at Copalis, operating on account of G. P. Halferty & Co. Its production was reported limited to about 300 cases.

Better-than-normal production of razor clams in Alaska is anticipated for 1950.

First, because the new regulations reduce the fall quota of the important Copper River area by 2,000 cases, increasing the spring quota by a like amount to 42,000 cases.

Second, because the Whiz Fish Products cannery at Kodiak has been equipped with a half-pound line, and is expected to utilize it actively for clam canning; and perhaps for crabs.

Changes in Alaska Shellfish Regulations

Most important change in the Alaska shellfish regulations for 1950 is a cut in the fall razor clam quota for the Prince William Sound-Copper River areas from 105,000 lbs. or 3,000 cases to 35,000 lbs. or 1,000 cases; the difference being added to the spring quota, which is increased from 1,400,000 lbs. or 40,000 cases to 1,470,000 lbs. or 42,000 cases.

The closed season on Dungeness crab fishing in Orca Inlet, starting June 1, is extended from Sept. 15 to Oct. 31. The minimum size of King crabs is raised from 5½" to 6½", and Canoe Bay in the Peninsula area is closed to King crab fishing as a nursery ground.

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and for
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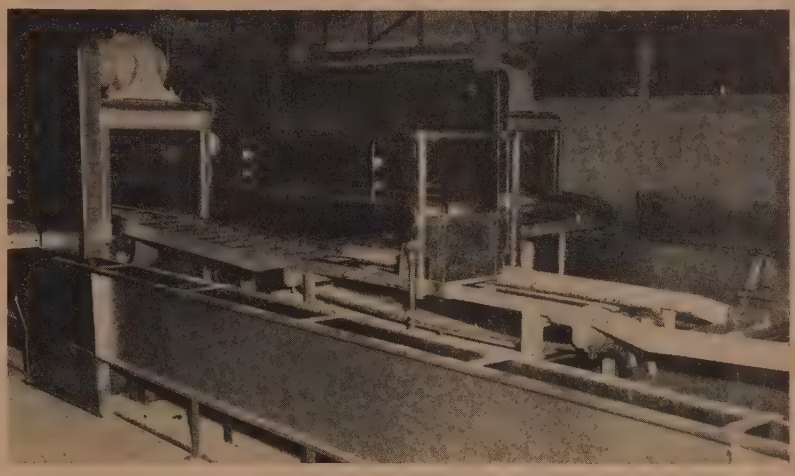
Samoan Tuna Cannery Equipment Wins Praise

Although the Samoan tuna cannery of Island Packers, Inc., the Gatty enterprise backed by Rockefeller venture capital, is reported to have been short of tuna, due to delay in developing production in Fiji waters, the equipment installed in the plant by Standard Steel Corporation, Los Angeles, is attracting wide attention by its advanced design and use of stainless steel wherever fish is in contact with metal, or where corrosion under tropical conditions might prove a problem.

The cleaning and packing tables in the plant are considered outstanding. Sanitary stainless steel in simple, flat surfaces for ease in cleaning is widely used, as are mechanical conveyors for all material coming to and leaving the tables. The fish reach the conveyors in wire baskets directly from the cookers. As the tuna are taken from the baskets and continue down the tables, the baskets are returned to the cookers on a separate conveyor belt. As the fish are cleaned, the edible meat is placed on boards and conveyed on through the automatic cutter to the packing table. During the cleaning process, the offal is pushed into a trough in the center of the table where it drops on to another conveyor belt and is carried to the reduction department.

As the cut meat on boards enters the packing end of the table, individual packers place the meat in tins, which are then conveyed on another belt to the sealing, cooking, cooling and labeling departments. Pieces not used in the solid pack operation are pushed on to a lower conveyor belt and go directly to the department where the chunk pieces are packed under that classification. Still another conveyor belt returns the empty boards to the cleaning department. These tables are adjustable to handle ½-lb. or 1-lb. tins, or both. All conveyors are driven by variable speed motors. Thus, the rate of travel can be adjusted to the capacity of the workers.

To insure proper assembly of this plant at the island, each piece of equipment in the entire plant was set up and completely assembled at Standard Steel Corporation and operated there during a lengthy test to guarantee perfect operation. Then, before shipment to Samoa, each and every piece was match-marked. The reward for this painstaking operation was justified in the following remarks received from J. P. Hickey, resident engineer and plant superintendent at Samoa: "Everything went together without a hitch; I had no trouble at all. Working with barefoot native men that wore skirts and talk no English was quite an experience, but everything went up fine and is working with perfection within this short period."



Two views in the Samoan cannery of Island Packers, Inc., the Gatty enterprise, showing above the tuna cleaning tables and, below, the guillotine knife and packing tables—all equipment being furnished by Standard Steel Corporation.

"Pan Pacific" Is Ninth Victim of Southern Seas

Pan Pacific, built in 1948 in Tacoma, now lies at the bottom of the ocean near Point Mugu, south of Port Hueneme. She foundered early March 6, flooding the engineroom and stopping the auxiliaries before radio announcement of the vessel's predicament could be made.

The crew, including two seven-year-old boys and four fishermen, abandoned the seiner in the powered skiff, and unable to start the engine, drifted for 36 hours before rescue was made by a Navy plane.

Pan Pacific was captained by Andrew Kuljis of San Pedro and had only just returned from an 80-day trip for tuna, unloading her fare at Terminal Island. Pan Pacific Fisheries, Inc., who had contracted for the vessel's fish, does not have any financial interest in the seiner.

Pan Pacific becomes the ninth fishing vessel in the Southern California fleet to burn or sink since the beginning of 1950.

The crew included Kuljis, Ernest Sharp, Engineer M. J. Schemp and Mitchell Kuljis. The vessel was on her way to Port Hueneme from San Pedro. The sinking occurred 25 miles offshore.

WILLIAM P. LIBBY, vice president in charge of traffic for the Plymouth Cordage Company, Plymouth, Mass., retired from the company on March 1 after 37 years of service.

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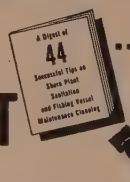

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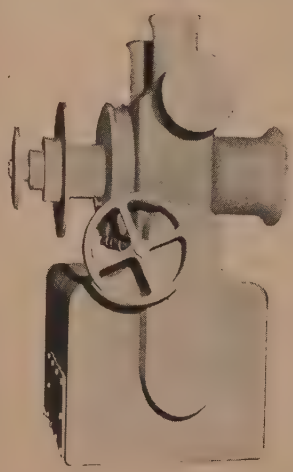

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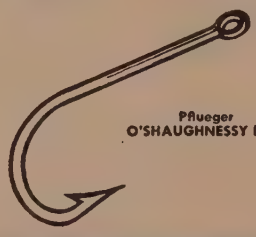

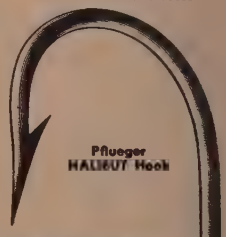

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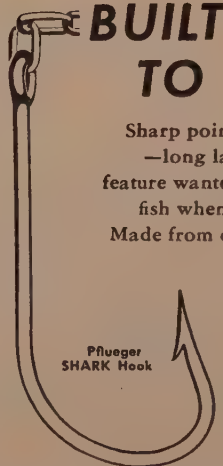

PFLUEGER

pronounced "FLEW-GER"

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Grays Harbor Crab Canning Far Behind

Washington crab canning operations, in common with those on the Columbia River, were reported far behind normal to the middle of March. One operator there reported that the boats were getting only light catches *when* they were able to work their gears, and that weather had cut activity to a low level. The individual crabs taken were excellent, he said.

Nominal price for crabs on Grays Harbor had remained 10c per lb., although competitive action between two of the factors saw bidding go up to 12c, with the possibility that this conflict might force other operators to raise their bids.

With the scant quota for razor clams, the bait situation took on panic proportions, with razor clams being bought as high as 32c per lb for crab bait.

Canada Reviews Fresh Salmon Export Rules

The Canadian government by order-in-council has provided regulations governing export of British Columbia salmon similar to those in effect last year, except that Pinks may not be exported between September 18 and December 31.

The regulations in effect this year specify that no one shall export from Canada any Sockeye or Pink salmon except in a canned, salted, smoked or cured condition, and that on and after September 1, 1950, no one shall export from Canada Cohoes except in a canned, salted, smoked, cured or frozen condition.

In the 1949 regulations an exception was made in that Pinks could be exported, except as frozen, during the September 18-December 31 period, but this will not prevail this year as there will be no appreciable run of Fraser River Pinks.

B. C. Fishermen Fearful At Return of Japanese

Several hundred Japanese will probably work in British Columbia's coastal fisheries this year for the first time since 1941.

In that year, following the outbreak of war in the Pacific, all Japanese fishing vessels were seized and Japanese resident in the coastal area were evacuated to the interior. About 23,000 Japanese and more than 1,100 boats were affected.

Until last year Canadian legislation prevented the return of Japanese to the coastal area. Since the security measure was cancelled there has been little evidence of a wholesale influx of Japanese to the coast. Most of the evacuees have found satisfactory employment in other parts of Canada or have gone back to Japan.

However, last summer a few Japanese indicated their desire to reenter the fishing industry and this spring at the beginning of March about 124 individuals had taken out a total of 204 fishing licenses, only a slight increase over last year's figures. At the same date some 2000 fishing licenses had been issued to fishermen other than Japanese.

Several Japanese families have gone to the Prince Rupert area to work in canneries along the Skeena. Some have also re-located near Steveston.

Indian fishermen many of whom replaced Japanese during the war years in the fishing industry complain that return of Japanese in large numbers would jeopardize their livelihood. Their argument is that they came to the assistance of the industry when it was short of manpower and demonstrated that they could perform an efficient job. As original inhabitants of the country, they maintain that they should be insured against unemployment as a result of any influx of Japanese.

The case of the Indians was voiced in the British Columbia legislature during its spring session by J. D. McRae, coalition member for Prince Rupert, who warned that protective measures adopted by the International Pacific Salmon Fisheries Commission covering offshore operations would be nullified if Japanese were permitted to resume large-scale operations.

The Canadian government takes the attitude that the Japanese in Canada, as British subjects, have as much right to engage in the coastal fisheries as anyone else and that they should not be subject to discrimination. While not encouraging a return of Japanese to the fisheries, the fishermen's unions have expressed readiness to accept Japanese-Canadians as members.

Baltzo Given Alaska Fishery Position

Position of assistant regional director of the Fish and Wildlife Service in Alaska is being created, and C. Howard Baltzo will be appointed to it, the Washington office announces. He will have the administrative duties formerly handled by George Kelez in addition to his biological responsibilities.

Mr. Baltzo for some time has been assistant chief of the Alaska fisheries branch with headquarters in Washington.

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- Fancy Kippered Sturgeon
- Fancy Smoked Sable Fish
- Fancy Oregon Crab Meat
- Fancy White Meat Tuna
- Fancy Solid Pack Tuna
- Fancy Blueback Salmon
- Fancy Shad Roe

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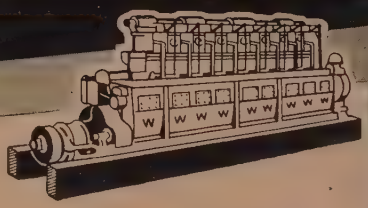

in the new fisheries vessel
"JOHN R. MANNING"

The 87-foot *John R. Manning*, constructed by the Puget Sound Boat Building Corp., Tacoma, for the U. S. Fish & Wildlife Service, is driven by a 6-cylinder, 11½" x 15" Washington diesel delivering 300 hp at 325 rpm.

Based at Honolulu, the ship will make extensive explorations in the central Pacific where unfailing engine performance for long periods is a vital consideration.

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FRED E. BARNETT CO.
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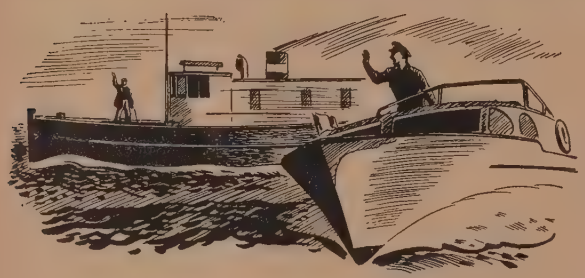

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In addition to regular **FISH BRAND** oiled and Arrow Brand rubber jackets, pants, three quarter coats, hats, aprons and sleeves all good dealers carry the **TOWER'S NEOPRENE** coated garments or can get them for you.

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TOWER'S ARROW BRAND

Gordon Jones Installs Cannery in Mexico

Gordon Jones, who retired after 49 years with the Alaska Packers Association, has just returned to San Francisco from Guaymas, Mexico, where he built and installed a fish and shrimp packing plant for Don Zacharias.

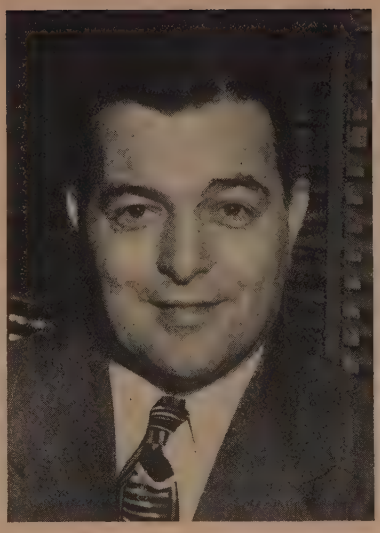
The plant will can tuna, shrimps, flaked fish and mullet. All American Can Co. equipment has been installed, with a 5-ton California Press Manufacturing Co. press, dryer, and other reduction plant equipment. A small plant for processing shrimp shells for chicken and gold fish food was also put in.

Mr. Jones served for many years as superintendent of the Alaska Packers Association salmon cannery at Larsen Bay, in Alaska.

His place at Larsen Bay has been taken by Laurence Freeburn, who for two seasons was Mr. Jones' assistant at Larsen Bay.

Phister Writes of Tuna

Montgomery Phister, counsel for the Van Camp Sea Food Co., is the author of an article concerning the tuna industry, entitled "America's Problem Fish," appearing in Nature Magazine.



A. H. Flower, sales manager, diesel engine division, Harnischfeger Corporation, Port Washington, Wis., manufacturers of P&H marine diesel engines, snapped by PACIFIC FISHERMAN in San Francisco as he was on his way north to the Seattle Boat Show. Mr. Flower made a complete tour of the Coast on his trip out here.

JIM CANNON, one of the head men of the Nakat Packing Corp. staff, Seattle, who suffered a stroke about a year ago, has been able to put in several hours a day at his office for some time, and is gradually recovering his strength.

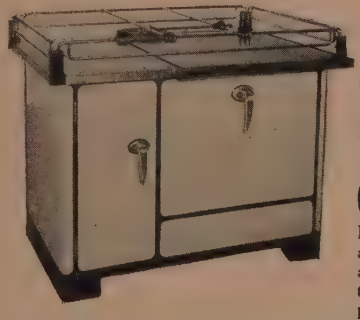
Yearbook Error Corrected

Through errors in reporting, figures shown in the 1950 YEARBOOK for canned salmon packs of P. E. Harris & Co. in Southeast Alaska and the Hydaburg Cooperative Association at Hydaburg were considerably less than the actual output. The Harris total from joint operation with Pacific American Fisheries was actually 110,141 cases at Hawk Inlet and 15,746 at Petersburg; while the Hydaburg total was 37,671 cases instead of 10,240 as reported.

In detail, the Harris pack included 1,027 cases of Reds; 106,402 Pinks; 13,246 Chums and 5,212 Cohoes, making a grant total of 125,887 cases at both points. The final Hydaburg pack included 784 cases of Reds; 29,686 Pinks; 5,683 Chums and 1,518 Cohoes.

HECTOR FERREIRA, head of Pesquera Industrializora de Guaymas, S.A., large shrimp operator in the Gulf of California, was in Los Angeles in early February, accompanied by his wife and daughter, Lolita, whose marriage at Los Mochis, Sin., is scheduled for April. While his family shopped for the wedding. Mr. Ferreira conferred with *WALTER BUTLER*, head of Los Angeles Provision Company, west coast distributors for his three shrimp brands, "Guaymex," "Clearblue" and "Lolita; and with manufacturers of refrigeration and plant equipment.

Beautiful and **TOUGH!**



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"Snow Cap"

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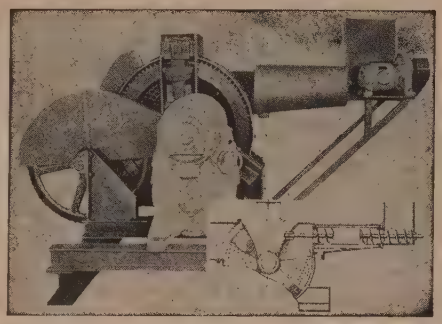
PINK
"Ocean Spray"—"Waterfall" —"Ocean Blue"

CHUM
"Golden West"—"Golden Glow" —"Sea Diver"

Cannery: **ANACORTES, WASH.**



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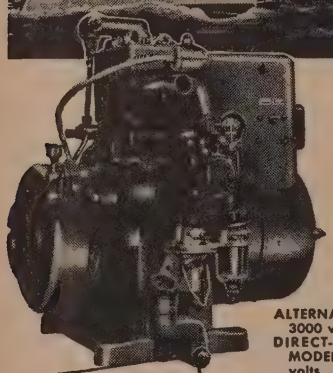

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LINES and LEADERS

Radiomarine Appoints New Sales And Service Agent in Hawaii

Appointment of Pacific Recording Company, Ltd., Honolulu, as the Hawaiian Islands sales and service agent of the Radiomarine Corporation of America, was announced recently.

Headed by the well-known Charles A. Allen, president, Pacific Recording Company, has been established for several years as specialists in the sales and servicing of sound equipment. It will service all radiomarine radio and electronic equipment on vessels which operate in, or pass through, that area. As a Radiomarine authorized dealer, Pacific Recording will also promote the sale of Radiomarine equipment in the Hawaiian Islands.

In addition to carrying an ample stock of Radiomarine standard equipment, service materials and parts, Pacific Recording has a staff of five expert radio and radar technicians to render prompt and efficient service and repairs.

The new service station is ideally located very near the Honolulu dock area and is only five minutes' drive from Kewalo Basin, the home port of the fishing fleets, as well as the nearby Alawai Basin which is the favorite harbor of pleasure craft.

This new appointment enlarges Radiomarine's service facilities in the Pacific area. The company also maintains service depots at Wilmington, Calif., San Francisco, Seattle and Portland, in addition to its many depots on the Atlantic and Gulf Coasts, Great Lakes and Mississippi River.

Radiaphone Co. Turns Out Low-Cost Direction Finder

A new, full-size direction-finding attachment that utilizes the receiving circuit of any radio or radio-telephone receiver, portable or stationary, is announced by the Radiaphone Company, manufacturers of marine radio equipment.

The company states this attachment now enables the average boat owner to have navigational certainty at all times and at moderate cost. Featuring extreme simplicity and speed of calculation, the Radiaphone Direction Finder can actually increase the sensitivity of the receiver. Its accurate sense characteristics easily determine the true direction of floating transmitters.

Case dimensions of this compact attachment are 9½" x 9½" x 3½"; loop diameter is 14". The Radiaphone Direction Finder is light in weight, with long life assured by its cast-aluminum construction. Loop is of anodized aluminum. All components treated for dampness and salt air exposure. Full cost of the D.F., installed, is under one hundred dollars, a substantial cost saving on this type of equipment.

For further information see your dealer or write the Radiaphone Company, 2435 E. Colorado, Pasadena 8, Calif.

Fairbanks, Morse Officials Lay Out Program for 1950

A meeting for the purpose of analyzing sales potentials on the West Coast and for outlining of Fairbanks, Morse & Co. sales program for 1950 was held in San Francisco last month.

In charge of the meeting was J. W. Wright, manager, general diesel sales, Chicago. Accompanying Mr. Wright was H. E. Dahlund, chief engineer, diesel division, Fairbanks, Morse & Co., Beloit, Wis. The Portland branch was represented by J. C. Elmburg, manager, and W. J. McIntosh, manager of the diesel engine department.

The Los Angeles branch was represented by A. M. McLaren, manager, and H. C. Heil, manager of the diesel engine department. The San Francisco branch was represented by R. M. Murray, manager, and Howard Oxsen, manager of the diesel engine department.

Top executives of the diesel engine division of Fairbanks, Morse & Co., were on the Pacific Coast last month from their Chicago headquarters. Left to right—E. L. Dahlund, chief engineer, diesel engine division; Roger M. Murray, San Francisco branch manager; and J. W. Wright, manager diesel engine division. Said Mr. Wright to PACIFIC FISHERMAN: "We appreciate the fact that the California sardine business is on its way back, and we are anticipating getting our share of the new engine business to power new fishing vessels on the Pacific Coast."

71 Cummins Diesels Described In Comprehensive Catalogue

Sixty-eight high-speed diesels for automotive, industrial and marine applications, covering the entire power range from 50 to 550 hp., and three medium-speed diesels, are described in a new 36-page condensed catalog just issued by Cummins Engine Company, Inc., Columbus, Ind. The catalog lists for the first time 27 new Cummins models introduced within the last 12 months.

Comparative charts, listing the major specifications for each engine, are included in the catalog to assist in the preliminary selection of a Cummins diesel for any specific application.

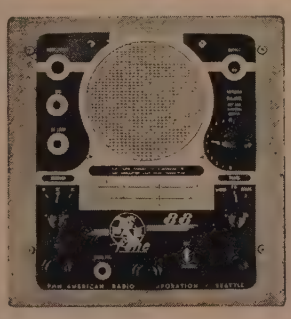
Torque, horsepower, and fuel consumption data at all rpm. and load conditions within the range of each engine are presented in "curve" form.

Each engine is pictured with a listing of standard equipment and notations on optional equipment which can be supplied.

One of the features of the book is a composite silhouette drawing indicating the mounting dimensions for all engines, and showing at a glance the range of horsepower available in almost the same mounting dimensions.

Cutaway drawings indicating major mechanical features of all Cummins diesels also are included and a cutaway and

PAR VALUE— PERFORMANCE



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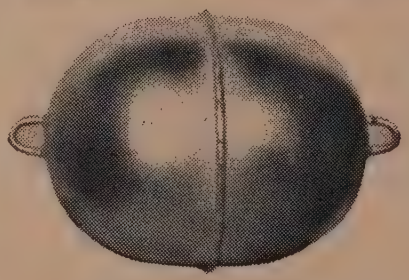

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complete description of the exclusive Cummins diesel system is shown.

Models illustrated in the catalog range from the Model H-400, developing a maximum of 100 hp. at 1800 rpm., through the supercharged Model NVHS-1200, the world's most powerful high-speed diesel now in production, developing 550 hp. at 2100 rpm.

Copies of the catalog, Bulletin No. 5218C, can be obtained from the 200 Cummins dealers, or Cummins Engine Co., Inc., Columbus, Ind.

Bullwinkel Becomes General Manager of Sunde & d'Evers Co.

Sunde & d'Evers Co. of Seattle, one of the largest and oldest marine supply houses on the Pacific Coast, on March 3 announced the appointment of Robert O. Bullwinkel as general manager.

Mr. Bullwinkel, although born in Wisconsin, is almost a native of Seattle, as he grew up and went through school there. He has just returned to Seattle from Minneapolis where he resigned as vice-president of the Northwest Air Lines to assume his new position, after seven years in the Middle West in the air transport business.

In his earlier days, in 1925, he joined the Admiral Oriental Line, predecessor of the present American Mail of Seattle and in 1928 was appointed Canadian manager with headquarters at Vancouver, B.C. In 1937, he joined the Pan American Airlines as traffic manager, and later the Northwest Air Lines.

Mr. Bullwinkel's addition to the Sunde & d'Evers staff entails no change in the executive set-up of the concern, with G. C. Sunde still remaining president and A. H. d'Evers secretary. The concern was established in 1882 and incorporated in 1892, and its ownership has passed down through many generations. Since moving from an old location in 1895 on Yesler Way, it has maintained its present location on the Colman Dock in the busiest part of Seattle's waterfront.

P&H Picks Parker to Handle Line in North California

Parker Diesel Engineering Co., 949 19th Ave., Oakland, Calif., has been appointed northern California distributor for the P&H line of marine diesel engines, manufactured by the Harnischfeger Corp., according to an announcement by W. A. Stiles, district representative of the diesel division of the corporation.

E. V. "Ernie" Parker, head of the Parker Diesel Engineering Co., has had a long career in the diesel engine business, and is known to practically all

Robert O. Bullwinkel, who resigned as vice president of Northwest Airlines to become general manager of the Sunde & d'Evers Co., Seattle marine and fishery supply house.

Pacific Coast users of marine diesel engines.

At the Parker Engineering Co., which Ernie founded in 1936, is a completely equipped diesel engine repair shop, with waterfront facilities for service and installation on vessels.

A 65-hp. P&H marine diesel engine will be stocked at first, with a complete stock of parts, Ernie said, and later on a 132-hp. six-cylinder engine will be stocked.

"Jerry" Reichart Back Again With Caterpillar at San Leandro

J. J. "Jerry" Reichart has just joined Caterpillar Tractor Co. at San Leandro as western news service representative. Jerry is not a newcomer to most editors, nor is he a newcomer to Caterpillar Tractor Co. After a number of years of newspaper work, Jerry joined the news service of Caterpillar Tractor Co. at Peoria in 1941.

In 1943 Jerry joined the U. S. Navy and served there at many points until his discharge in 1945. He again returned to the news service of Caterpillar Tractor Co. at Peoria, but having become acquainted with the West, decided he would like to move to the Coast. In 1947 he joined Cutter Laboratories at Berkeley, Calif., where he remained as news editor engaged in news service and publication work until rejoining Caterpillar Tractor Co. at San Leandro in November of this year.

Enterprise Raises Rasey To Diesel Sales Manager

Appointment of Gerald C. Rasey as sales manager of the engine division, Enterprise Engine & Foundry Company, has been announced by James S. Watson, Enterprise general sales manager.

A native of Beloit, Wisconsin, Rasey started as an apprentice engineer in 1918 while attending college, and in the intervening years has been continuously identified with the diesel engine field in both engineering and sales.

During World War II, Rasey was one of the "iron men of Hendy," when he served with the Joshua Hendy Iron Works at Sunnyvale, Calif., as sales manager of the diesel department. The famed Hendy diesels are now the equally well-known Enterprise "H" series, widely used in both stationary and marine installations.

Rasey is located in the San Francisco headquarters of Enterprise Engine & Foundry Company.

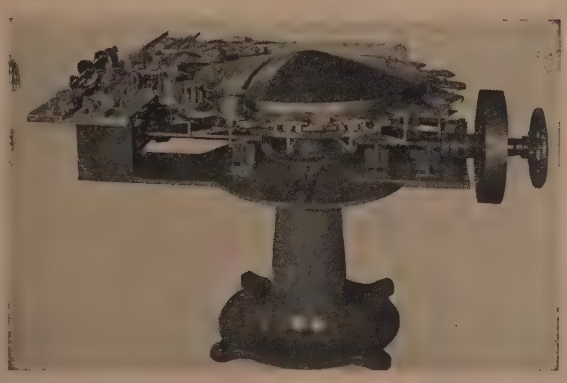
Vickers Hydraulic Drives For Fishing Craft Described

An extensive line of hydraulic equipment for marine auxiliary drives and steering mechanisms is described in a new bulletin from Vickers Inc. Unusual precision and smoothness of control, space savings, flexibility of installation, reliability, and lower maintenance costs are important features of these drives, which are built around the well-known Vickers hydraulic units that have earned an unexcelled reputation in the industrial and aircraft fields for more than 25 years.

Write for Bulletin No. 3940 to W. E. Rouse, manager, Marine Sales Division, Vickers Inc., Oakman Blvd., Detroit 32, Michigan.

Kettenburg Heads San Diego Industries

George W. Kettenburg, Jr., head of Kettenburg Boat Works, San Diego, has been named president, San Diego Industries, Inc. According to the new head, "San Diego Industries contemplates an expanded program of local service during the year."



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Griffith-Durney Opens Minneapolis Branch

W. W. Durney, president, Griffith-Durney Company, Los Angeles, canned fish brokers and distributors, has announced the opening of a branch office at 606 Wesley Temple building, Minneapolis, effective January 1. In charge is Don Harris who will handle sales in that area and also service all territory where Griffith-Durney does business in the mid-west.

Universal Motors Brings Out New Clutch and Power Take-Off

According to a recent announcement from the Universal Motor Company, 423 Universal Drive, Oshkosh, Wis., several Universal Marine Motors are now available with forward clutch and power take off. This equipment is being supplied primarily to meet the needs of commercial fishermen and workboat operators who desire engines with means for hauling in nets, operation of winches, and other marine gear. The forward end clutch and power take off which is the twin disc clutch type is available on the Universal 90-hp. Cruiser Six, the 110-hp.

Willard Sends Bowron From Dallas to California

An important change in the Willard Storage Battery Company's California sales organization was announced recently by G. A. Borchik, manager of replacement sales.

W. L. Bowron, formerly sales manager in the Dallas district, has been appointed California district sales manager. He replaces W. L. Tyler, a veteran of 27 years with Willard, who has been granted an indefinite leave of absence because of ill health.

Mr. Bowron, who has had wide sales experience with Willard, has been active in the Y.M.C.A. and Community Chest in many cities throughout the country. He is a licensed airplane pilot.

Shell Oil Publishes Pacific Tide Tables

Shell Oil Co. has just published a very complete set of tide tables for the Pacific Coast in two sections. One booklet covers the Pacific Coast from Humboldt Bay to the Puget Sound area, and the other covers from Cape Mendocino to Sihuatanejo Bay, Mexico.

The booklet covering the southern section of the coast also has moonrise and moonset tables, especially valuable to sardine fishermen. Both booklets contain a revised and copyrighted table of Shell outboard motor lubrication recommendations.

In addition the booklets have a table of U. S. weather signals; Pacific Ocean distances between points on the Pacific Coast; signals between towing vessels and vessels towed; a chapter on artificial respiration; and many other interesting features.

Copies may be obtained free at any Shell marine service station; at District Shell headquarters; or by writing or calling at Shell Pacific Coast headquarters, 100 Bush St., San Francisco, Calif.

Enterprise "H" Series Diesels Described in Bulletin

A new bulletin featuring the complete line of Enterprise "H Series" marine diesel engines is now available. Formerly known as the "Hendy 30 Series," these engines range from 135 to 265 h.p. at 600 to 900 r.p.m. in 6 and 8 cylinders.

The new 8-page, two-color bulletin describes construction and operating features, with a complete illustrated explanation of the simplified Enterprise fuel-injection system.

Bulletin H-15 is now available from Enterprise Engine & Foundry Company, 642 Florida St., San Francisco 10, California.

FOR SALE

Two 87-foot draggers, 21-foot 6-inch beam, 320 Fairbanks-Morse Diesel Engines. Will hold about 130,000 lbs. of fish. These boats are 4 years old and in excellent condition, boats are fishing every day. Will sell both boats for $125,000.00. Write to: Walter C. Benson, 18 Bartlett Parkway, Winthrop, Massachusetts.

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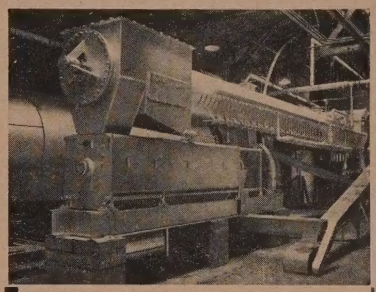

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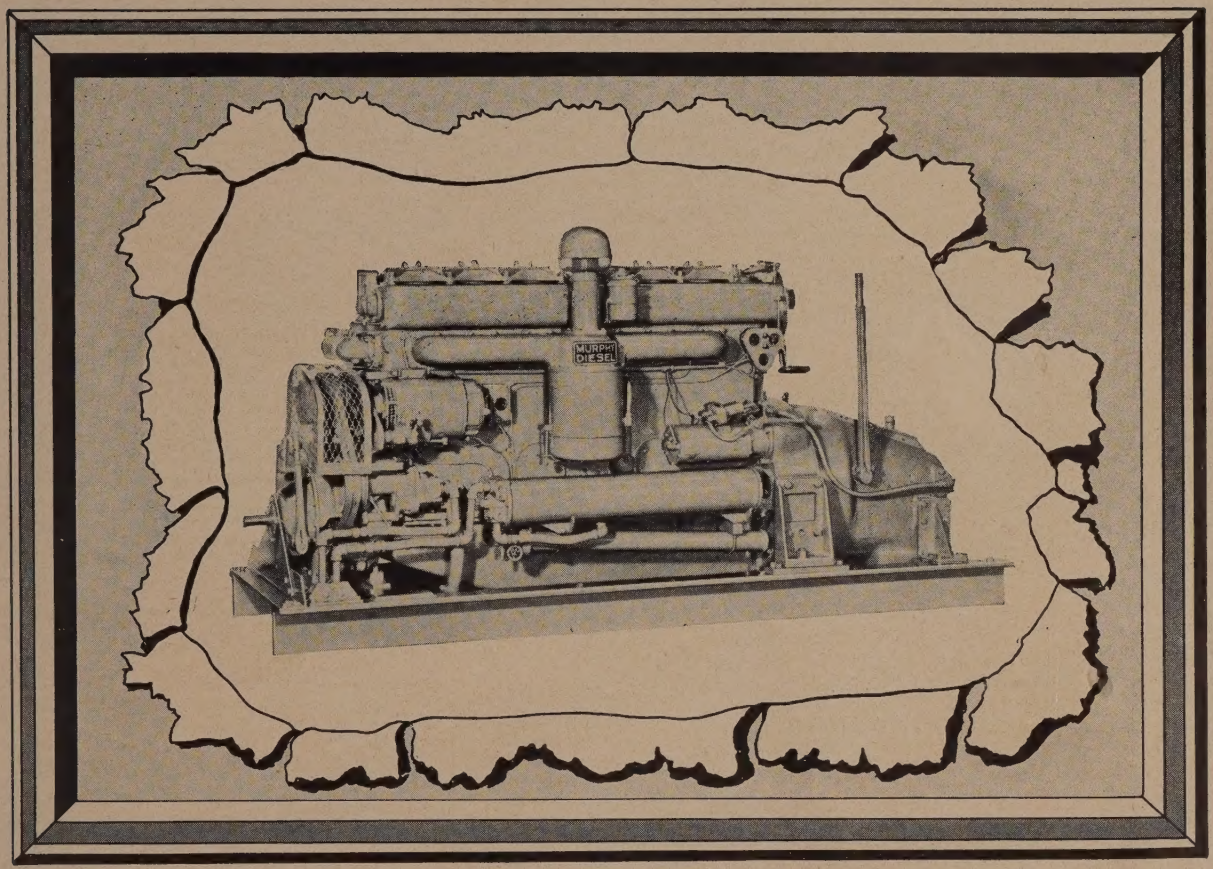

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